THE ART OF
CONCRETE GENIE

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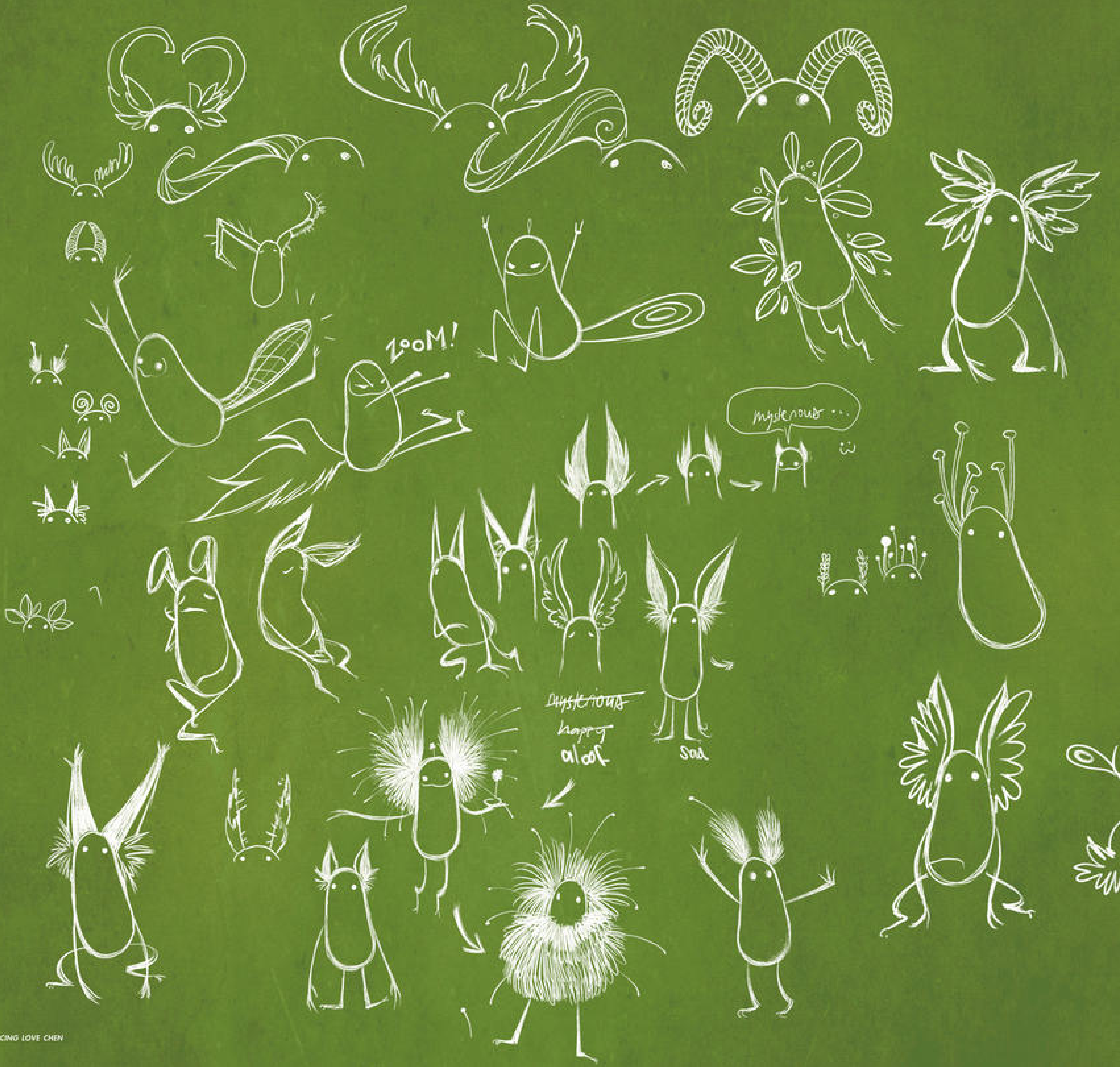
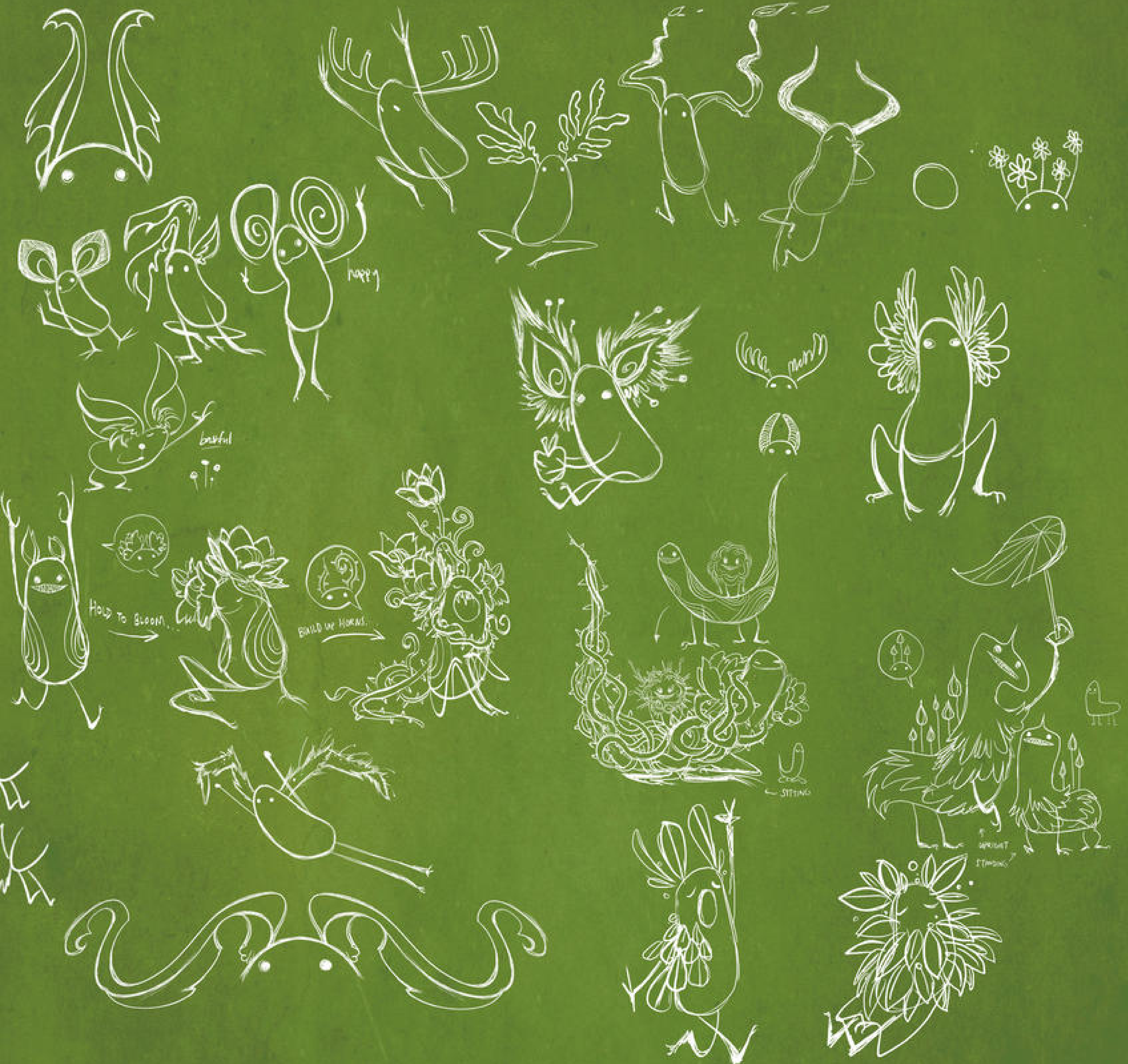
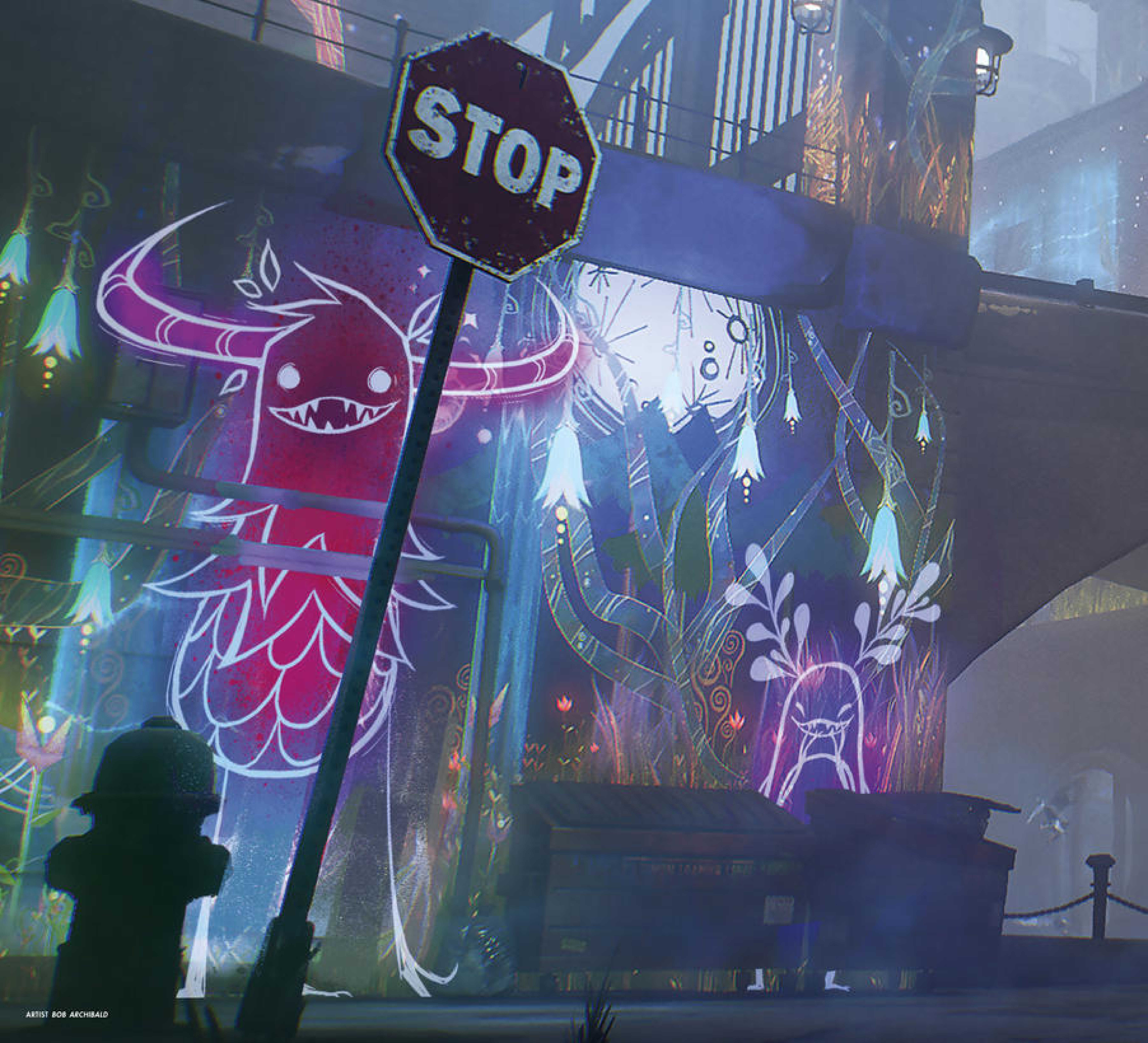

ZOOM!
mysterious ...
~~mysterious~~
happy
aloof
sad

ARTIST LANCING LOVE CHEN


happy
bashful
HOLD TO BLOOM...
BUILD UP HORNS...
SITTING
UPRIGHT
STANDING



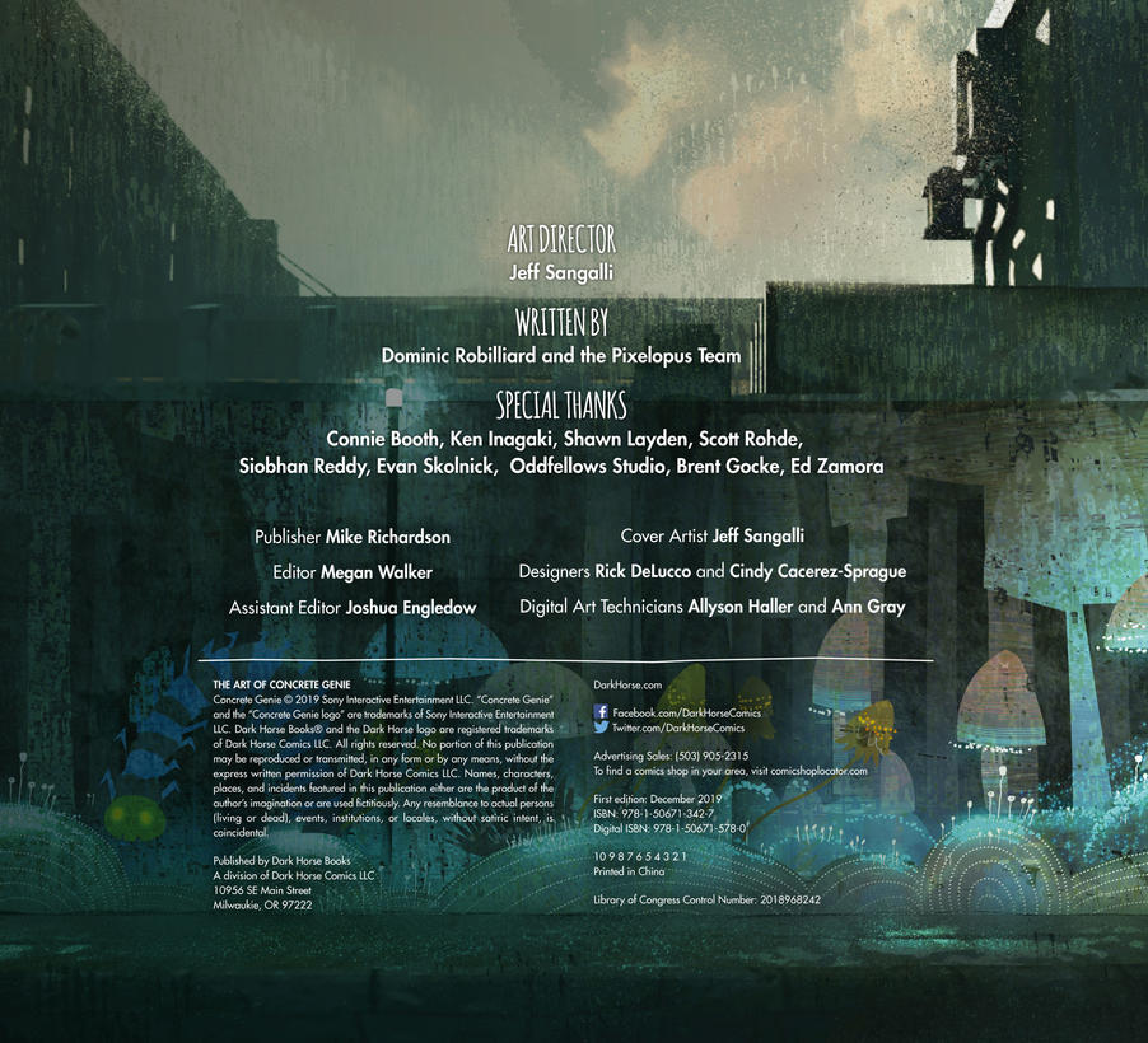
ARTIST *BOB ARCHIBALD*

THE ART OF
CONCRETE GENIE

FOREWORD BY
Siobhan Reddy

INTRODUCTION & CAPTIONS BY
Dominic Robilliard

DARK HORSE BOOKS



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THE ART OF CONCRETE GENIE

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ARTIST JEFF SANGALLI

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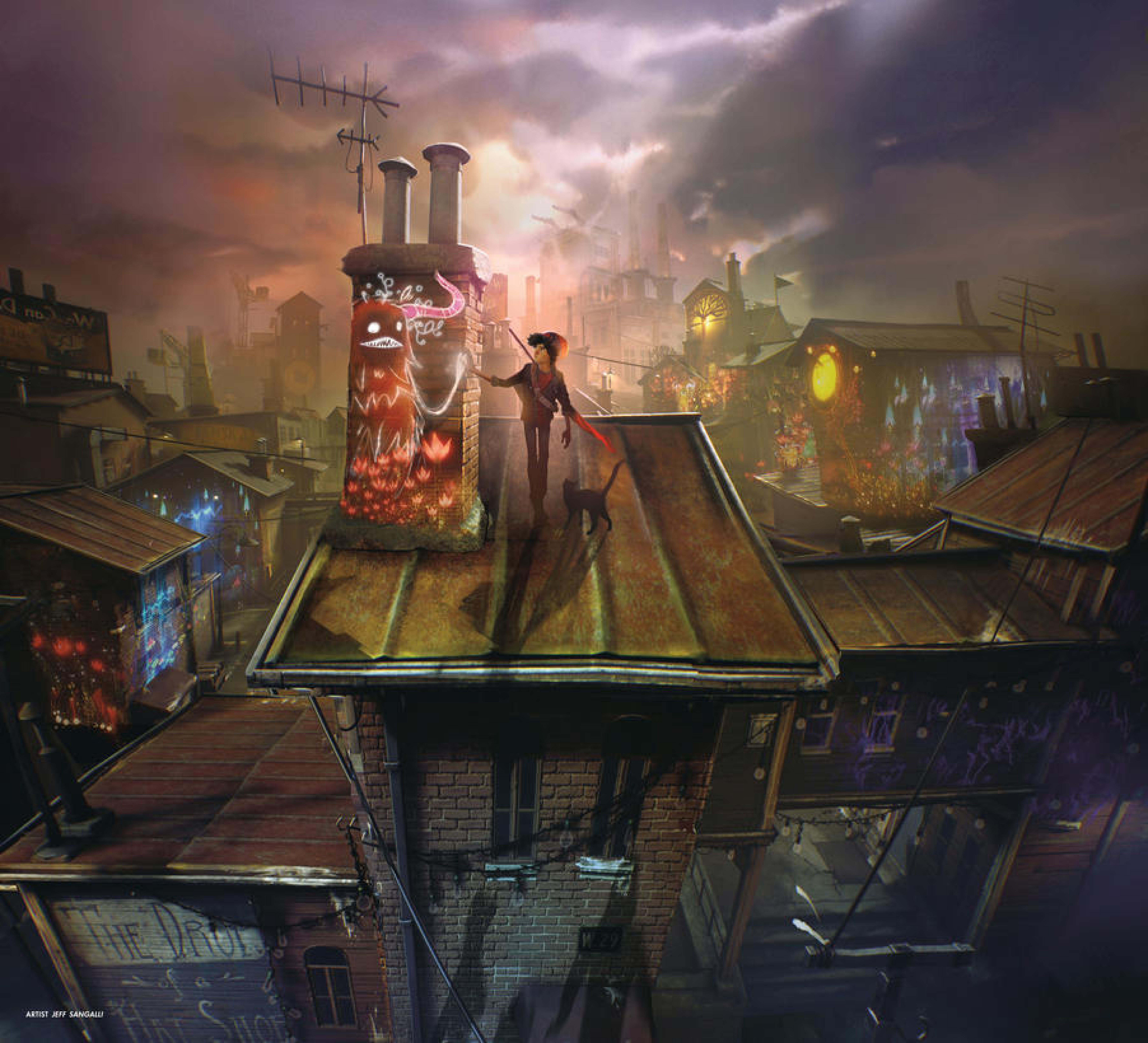
THE DROP
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ARTIST *JEFF SANGALLI*

ARTIST LUCIE ROBERTS

FOREWORD BY

SIOBHAN REDDY

STUDIO DIRECTOR, MEDIA MOLECULE

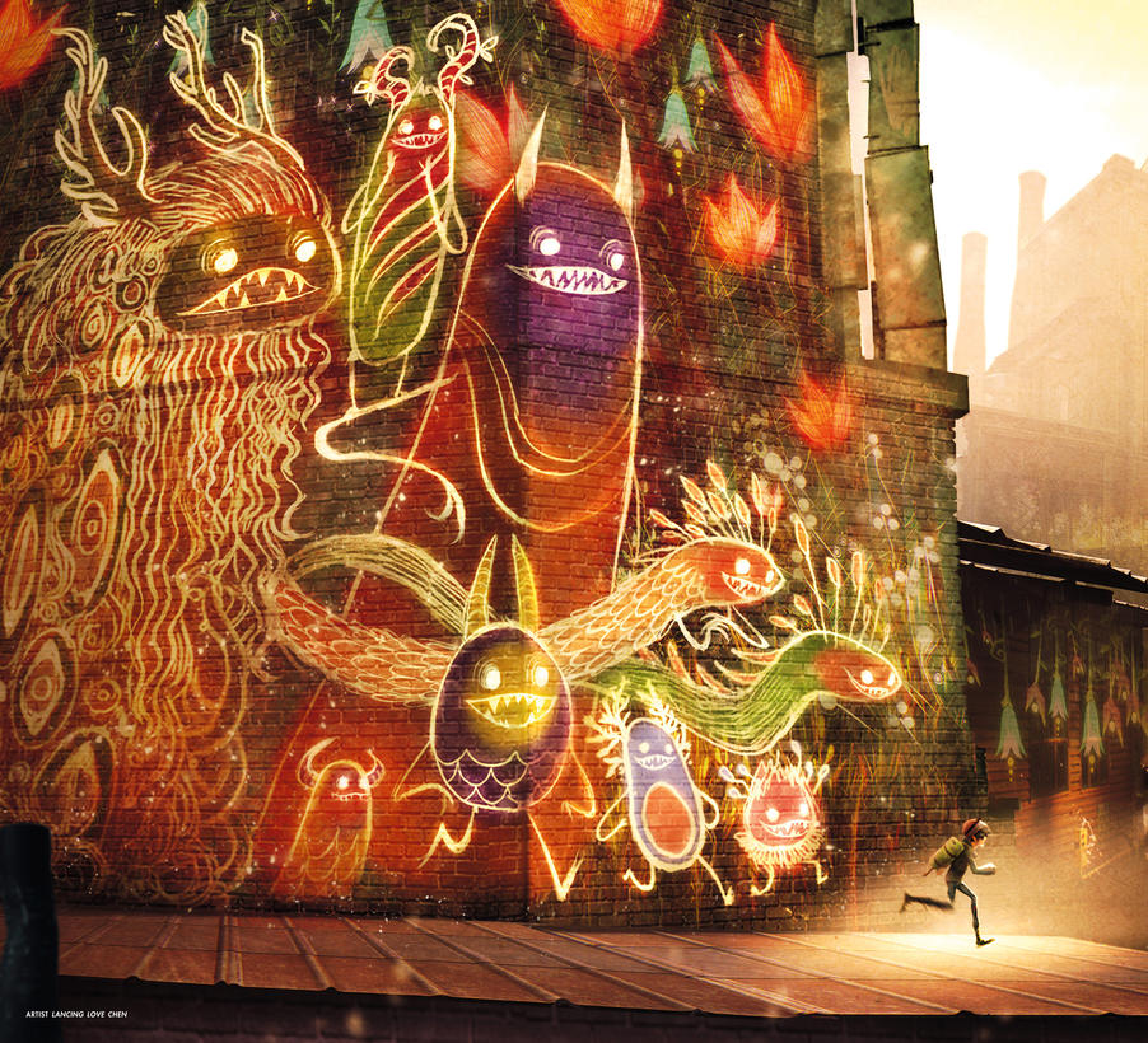
Imaginations have the power to solve every problem that we encounter. They can give us the powers to dream up new worlds, think up solutions that challenge the status quo, and give us the power to draw a doodle that makes someone smile when they are feeling scared. Art provides us with an avenue for expression, especially as we grow and change and find our place in the world. I think about my own childhood, scribbling onto a page after a hard day at school, or when, as a teenager, I had so much going on in my head that the only way I could deal with it was to express myself through art or music or dressing in clothes that really annoyed my parents. And as an adult, I find I need it just as much. Self-expression and creativity are vital aspects of being human.

Concrete Genie takes something so hard to describe, like the intimacy of therapeutic art, and takes us on an incomparable journey. It's a game jam-packed with heart, and it's inspiring to see friendship, creativity, and those feelings that are so unique to us as teenagers at the core of this beautifully art-directed game experience.

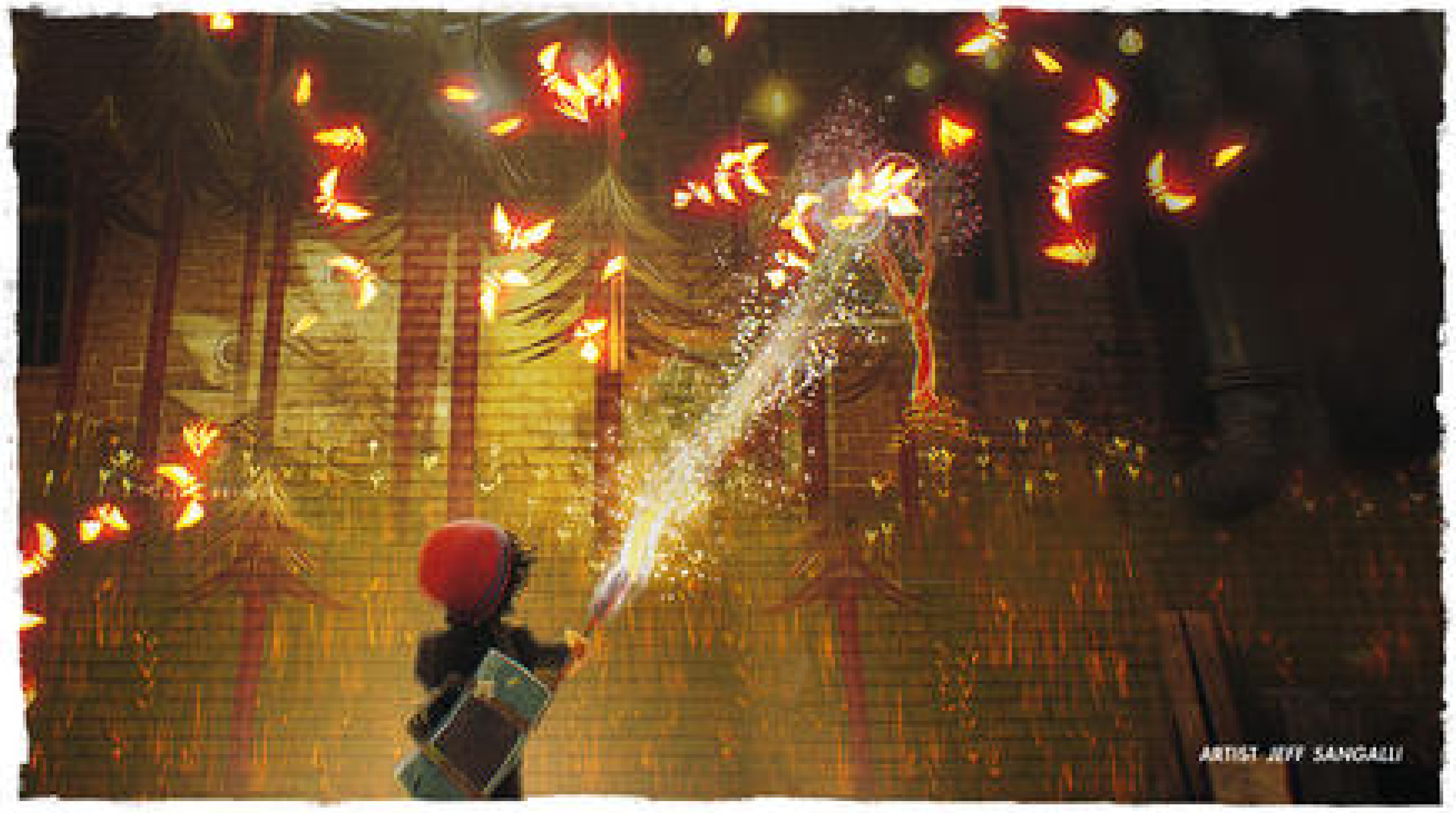
. . . But this shouldn't surprise anyone. The Pixelopus team are a diverse group of game developers, who have been fostered by their fantastic leaders, Dom & Jeff, to share a bit of themselves in this game. Walking into the team's space in Sony San Mateo is like walking through a magical doorway into the team's imagination. The walls are adorned with their beautiful art; it's colorful, friendly, it is a happy place. I feel like Ash would be right at home in there.

It's also a project jam-packed with heart! I have been lucky enough to witness the love and care the team have put into making *Concrete Genie*. They dreamt it up, brought these characters to life, gave them a voice, and have worked through the thousands of creative problems that we encounter when making games. *And* I think they went and created a masterpiece! A masterpiece that shows off the power of art, and how our medium of games can bring experiences uniquely to life. We all need art to help us make sense of things, and I know that *Concrete Genie* will be an important piece of work for everyone that experiences it. *So proud!*

So, to those of you reading—please enjoy the work of this talented and wonderful team. They are the only people in the world who could put this all together. I love you, Pixelopus, thank you for inspiring me and for sharing a part of yourselves. Ash's journey is a gift, and I for one am very grateful!



ARTIST *LANCING LOVE CHEN*


ARTIST: JEFF SANGALLI

INTRODUCTION BY

DOMINIC ROBILLIARD

"ARE GAMES ART?" With that tired old question thankfully behind us, perhaps it's a natural progression to focus our attention on creating a game more directly *about* art. But I still don't think either art director Jeff Sangalli or I believed we would ever have a chance to work on such a unique title like *Concrete Genie*.

To work with this wonderful and talented young team is such an honor and has been incredibly rewarding. As Jeff and I look through the pages of this art book, we're filled with awe and pride for this small yet incredible art team. These pieces are still as artistically impactful as the first time we saw them. But for us they now hold additional resonance: they are the creative waypoints that led us through almost every key part of *Concrete Genie*'s development. Wherever possible within each chapter, we've laid out the visual development to represent that journey.

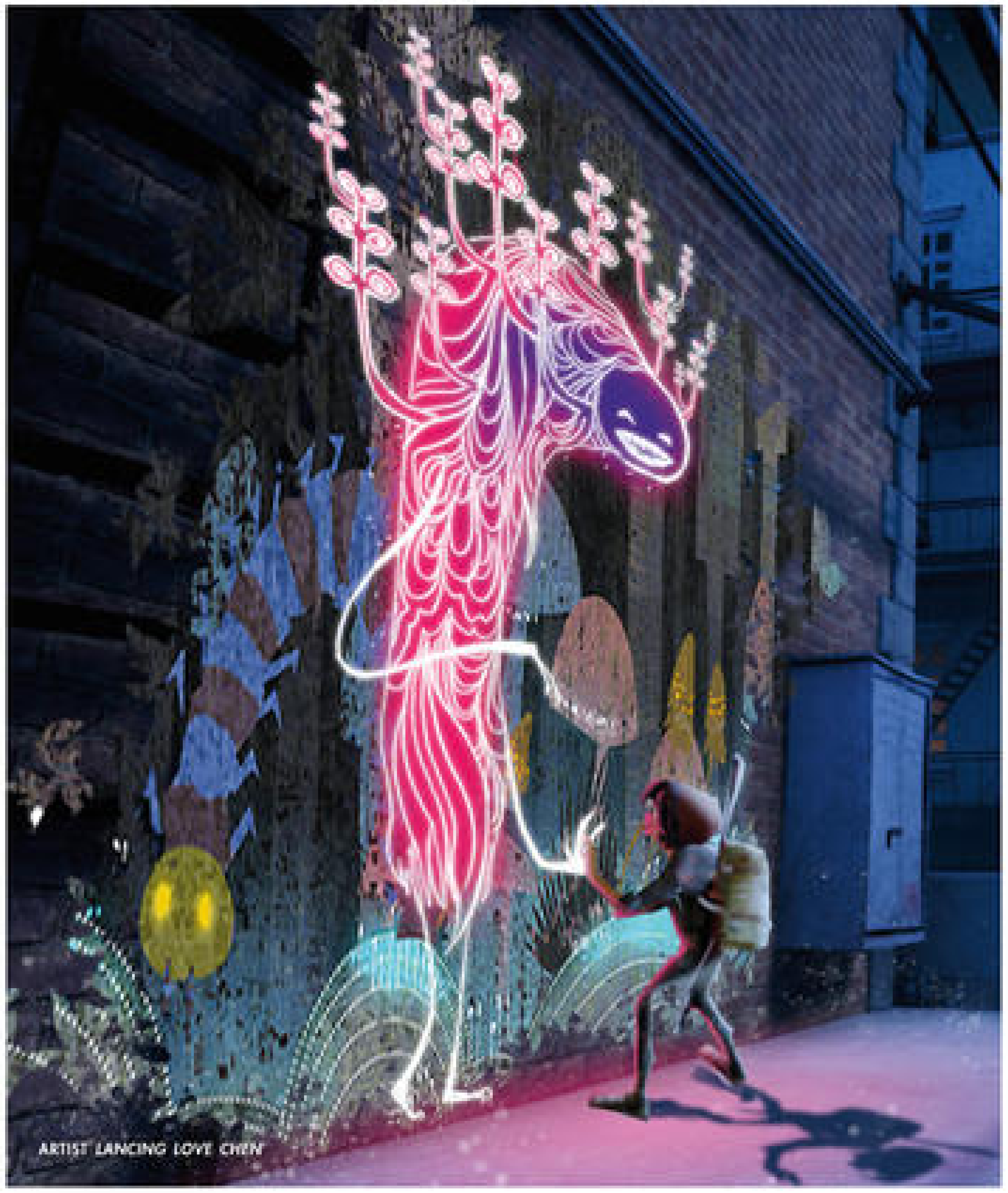
Our game is about a young boy trying to use the power of creativity and self-expression to help cope with some very difficult things that are happening around him. Which is why it's so important that our artistic gameplay mechanics truly allow any player to effortlessly create beautiful artwork as freely and as intuitively as possible. This connects you to Ash and his story in an immediate way that only a game can deliver, and the whole experience of *Concrete Genie* depends on that connection. When the bullies start to ruin Ash's creations, you understand how he feels because it's not just Ash's artwork—it's *your* artwork.

These free and creative mechanics also allow everybody's version of *Concrete Genie* to look unique. We as a team can't wait to see how people illustrate their own versions of the town of Denska. It was really important to us to make sure each player feels like they are an artist and can really leave a personal mark on the game. To express themselves on the walls of the game world however they want to.

When we started this second project in earnest, back in early 2015, we had just finished shipping our first title, *Entwined*, on all the PlayStation formats (and even an iOS/Android version too). The team was still very small (eight people), but we knew that we wanted to be significantly more ambitious, in every way, for our second title.

When we began the teamwide concepting process that eventually led us to *Concrete Genie*, that expanded ambition was easy to see in the multiple ideas we came up with. Each idea we explored involved a totally unique world, story, game design, and look. The vision for each one also clearly demonstrated another extremely important side to our team: every concept had an important message, or "heart," encapsulated within them. From that point on, it was clear to Jeff and I that making games with heart was not just important for this team, it was intuitive and natural. As well as unanimously deciding as a team that *Concrete Genie* was the concept we wanted to move forward with, we also learned enough about ourselves during this period to shape our mission statement at Pixelopus: "To make beautiful and innovative games with heart."

Our mentors at PlayStation—Ken Inagaki, Connie Booth, Scott Rohde, and Shawn Layden—have supported this mission unflinchingly and patiently. *Concrete Genie* would



ARTIST LANCING LOVE CHEN

not exist outside of the safety and protection they have provided us. More than that though, there have been critical moments in our development where we have lost ourselves in the weeds of a particular creative challenge or struggled with perspective on some issue or another. Their guidance in those difficult moments has helped get us back on track in the most proactive ways possible. Perhaps more importantly, these moments of executive clarity were often accompanied with more time to find what we were looking for. I think this special type of team relationship and trust is one of the most unique parts about working as part of Worldwide Studios.

One of these inflection points, at a key milestone, led directly to our breakthrough with the "Living Paint" mechanics in *Concrete Genie*. We had tried multiple gameplay mechanics, trying to give the player a meaningful sense of ownership over what they put on the walls in the game, but it wasn't until we were truly able to take direct paint strokes from the player's input (through the motion sensing controls of the DualShock 4) and transform them into living art that every piece of the game started to fall into place.

Suddenly, the balance of having the game transform what you painted into something beautiful (but not transform it so much that you no longer recognize it as your own artwork) meant you felt true ownership over what you made in the game. I will never forget the moment when David Lee Swenson, one of our engineers, showed Connie the first playable prototype for our butterfly brush. She and Ken instantly shared our excitement for it and recognized its potential.

We never looked back after that.

As we set out to create the other sixty or so "Living Paint" designs, Jeff helped focus their development with artist Lancing Chen by articulating that "every time you paint in the game it should feel like that moment when you were a kid, drawing with a crayon for the first time and could just lose yourself in a moment of creation." There is a joy and nostalgia to painting in the game that I personally trace right back to this particular insight from Jeff. I think every kid at some point imagined their drawings coming to life, and this game is meant to be the embodiment of that dream. I can't wait for everyone outside of the team to see all the stunning artwork that was made to drive the creation of our Living Paint. And all of that visual development is presented here for the first time.

The Genie painting mechanics followed soon after, and another emotional pillar of the game fell into place, which is that these creatures Ash paints for himself in the walls of Denska are like the friends he wished he had in real life. Having the player able to customize them and affect their personality through how they are painted hopefully creates a similarly strong connection to them, mirrored in Ash's relationship with them presented through the gameplay and story. The additional challenge with the Genies from an engineering perspective was that they had to have significant AI and procedural animation capabilities so that they can move, react, and interact with Ash in convincing (and often mischievous!) ways despite being individually painted by players. The proprietary technology and animation tools that our engineers developed to help this dream come true for the game was another critical turning point for us, and more specifically it has allowed our animation intern Tony Vu to generate thousands of animations for our Genies that otherwise would not have been possible for our small team. Engineers sometimes aren't thought of as artistic, but we are so fortunate that our engineers absolutely are true artists—not just because of the creativity in their code-related problem-solving, but because of how willingly they embrace and support the game's open-ended creation mechanics, and the creativity required in designing and developing them.

With these cornerstones of the gameplay settled, the other parts of the game also began to fall into place. Ash as a character and his story evolved around these painting mechanics, and has been beautifully realized by twins Becky and Lucie Roberts. Like all the artists in the Pixelopus team, Becky and Lucie have to be skilled in many areas. They are invariably called upon to create concept art for story beats and design characters as well as animate our characters and cutscenes (by hand, without motion capture). In this day and age, it's unusual for all of the cinematic and in-game animation to be done by the same people, particularly with the intense animation requirements of a third-person adventure move set. It's been enormously challenging for them and their handful of animators to cover all that ground, but I think it gives Ash a cohesion and consistency in the game that works so well for the title.

Hand in hand with the character animation is our unusual approach to character facial performance. Lacking resources to render characters with contemporary facial capture techniques initially posed a bit of a challenge as our narrative goals within the cutscenes clearly needed characters who could emote, deliver the lines of our amazing cast of child actors, and really connect with the players watching them. The solution we found ended up working so well that I can't imagine our game with characters who perform in any other way, and it's down to the animation team's ability to create amazing 2D as well as 3D animation. All of the character facial animations are hand animated in time to the recorded audio as flipbook animations and then mapped over the facial geometry of each character. It's incredibly time-consuming, but this meticulous approach to each frame of facial animation perfectly complements the handcrafted, stop-motion aesthetic of the art direction.

We've been incredibly fortunate to add a small number of very talented, very experienced senior team members to Pixelopus during the development of *Concrete Genie*. One area in particular that benefited from this was in our world development. Bob Archibald, our environment artist, was someone Jeff and I had wanted to join our team for some time. And from Bob's first day, the port town of Denska immediately clicked and took off. He was able to instantly take the beautiful concept designs of Jeff and Taylor Lambert and translate them into picture-perfect 3D levels, quickly developing them with navigation and gameplay metrics in mind but without losing any aesthetic quality at all. Bob is somehow able to flip a mental switch and convert to designer—collaborating with level designer Christian Chang over any gameplay-related issues—then flip back to environment artist, making whatever changes are required, confident that he can always achieve the highest quality aesthetically without compromising on gameplay. I still marvel at the visual quality and diversity in our game world, and can't believe that it's the work of just Bob and our former intern (now team member!) Daniel Wilkes.

One of the most wildly challenging parts of this project has been the visual effects. We knew from the outset that rendering the visual impact around all of our unique art-driven gameplay mechanics and complex story sequences would be very challenging. But I don't think any of us were quite ready for how demanding this part of the game would be. The title's gameplay and narrative have quite a spectacular twist in the third act, requiring almost a whole game's worth of new VFX alone. Ashwin Kumar (who also came up with the first concept of *Concrete Genie*, hence our hero being named Ash) has risen to this challenge. He's formed a productive and powerful partnership with concept artist Taylor, and between the two of them they have designed, iterated, and executed on one of the broadest sets of visual effects of any game Jeff and I have worked on.

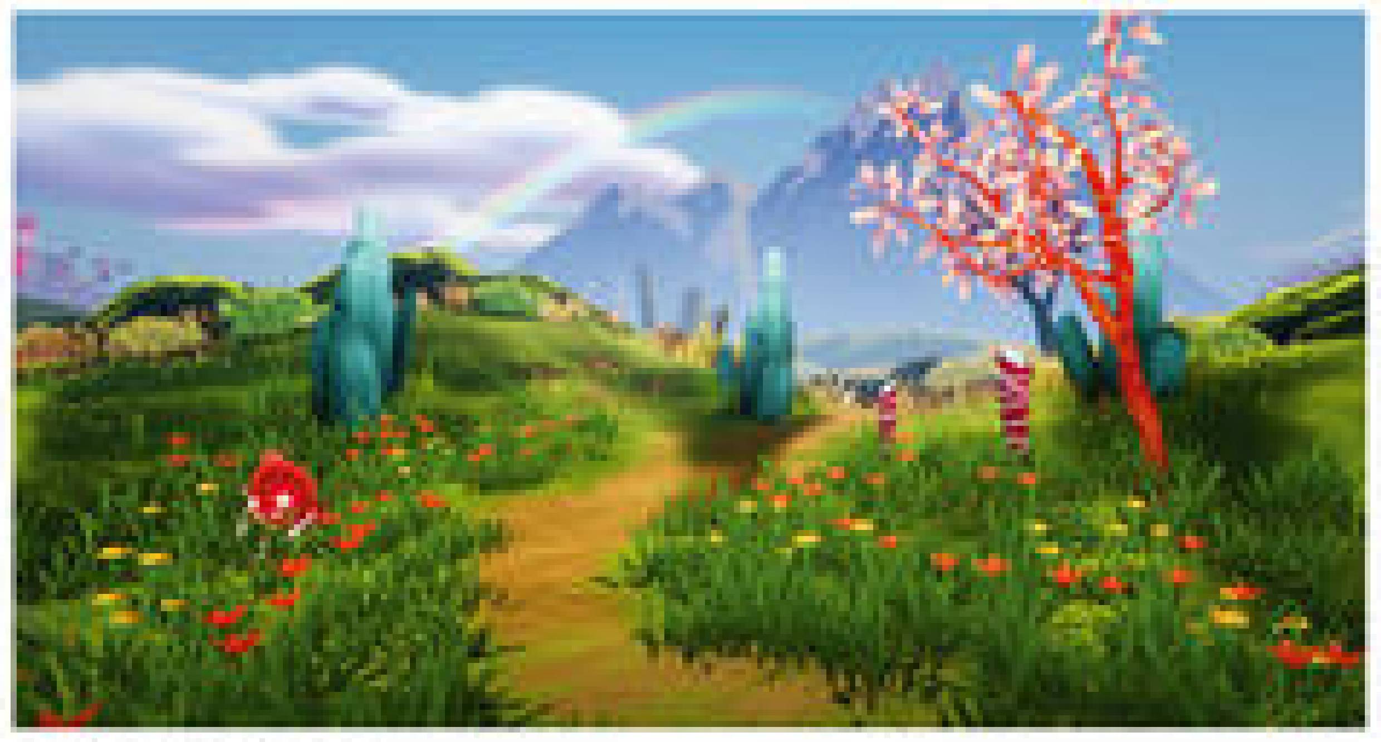
The final piece of the puzzle was the addition of a PS VR component to *Concrete Genie*. Ever since the original concept was picked and put into development we thought it would be perfect for a VR experience. Painting has a natural place in the medium, and with our tech enabling anyone to make beautiful artwork that comes to life, what better way to get even closer and more connected to your artwork? However, with our small team size it simply wasn't feasible to take this on ourselves. I reached out to two incredibly talented former colleagues of ours: Jeff Brown and Dave Smith. We started talking to them about the game and its VR potential. They very quickly came up with an amazing pitch for what they would do with the project if they had the chance. Jeff (Sangalli) and I loved it so much that we hired them straight away and helped build a small team around them right next to us at the PlayStation San Mateo campus. We are absolutely thrilled with how beautiful the PS VR experience within *Concrete Genie* has turned out and this new VR group has a very bright future ahead of it.

ARTISTS ASHWIN KUMAR (MODEL), BYRON DAVID (MATERIALS)

Jeff and I hope that you enjoy this diverse and unique collection of artwork. We're so excited for the chance to give everyone such a detailed look into the production of this unique game. I'm also really happy that the individual artists themselves have found the time (somehow) to write accompanying text for their pieces so readers can have direct insight straight from them about what went into each piece. These parts in particular show the passion and heart that our art department has put into *Concrete Genie*, and as these images summarize every single aspect of the game, it is a beautiful representation of not just their creative integrity but that of our entire team.

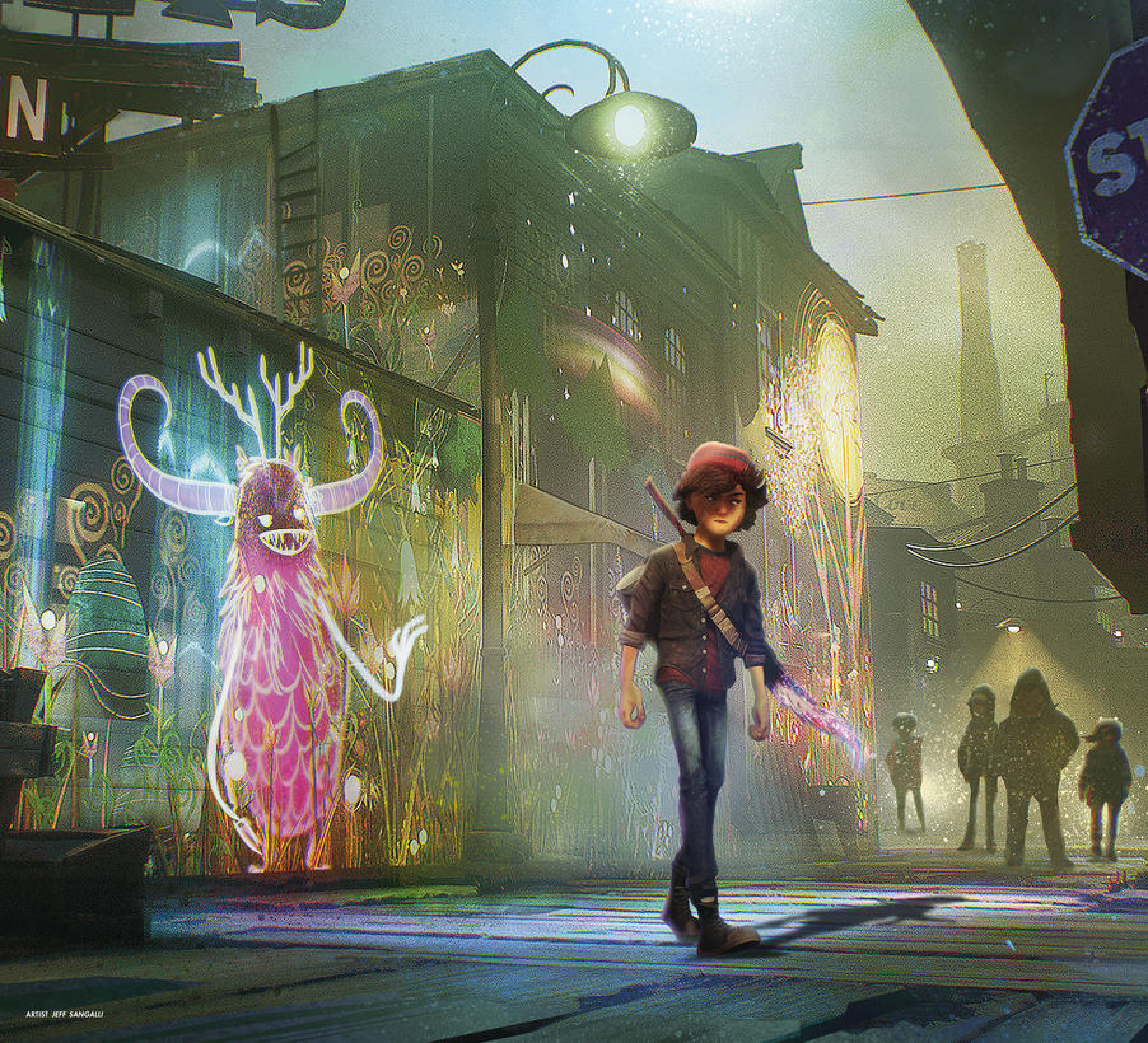
July 2019

ARTIST BOB ARCHIBALD

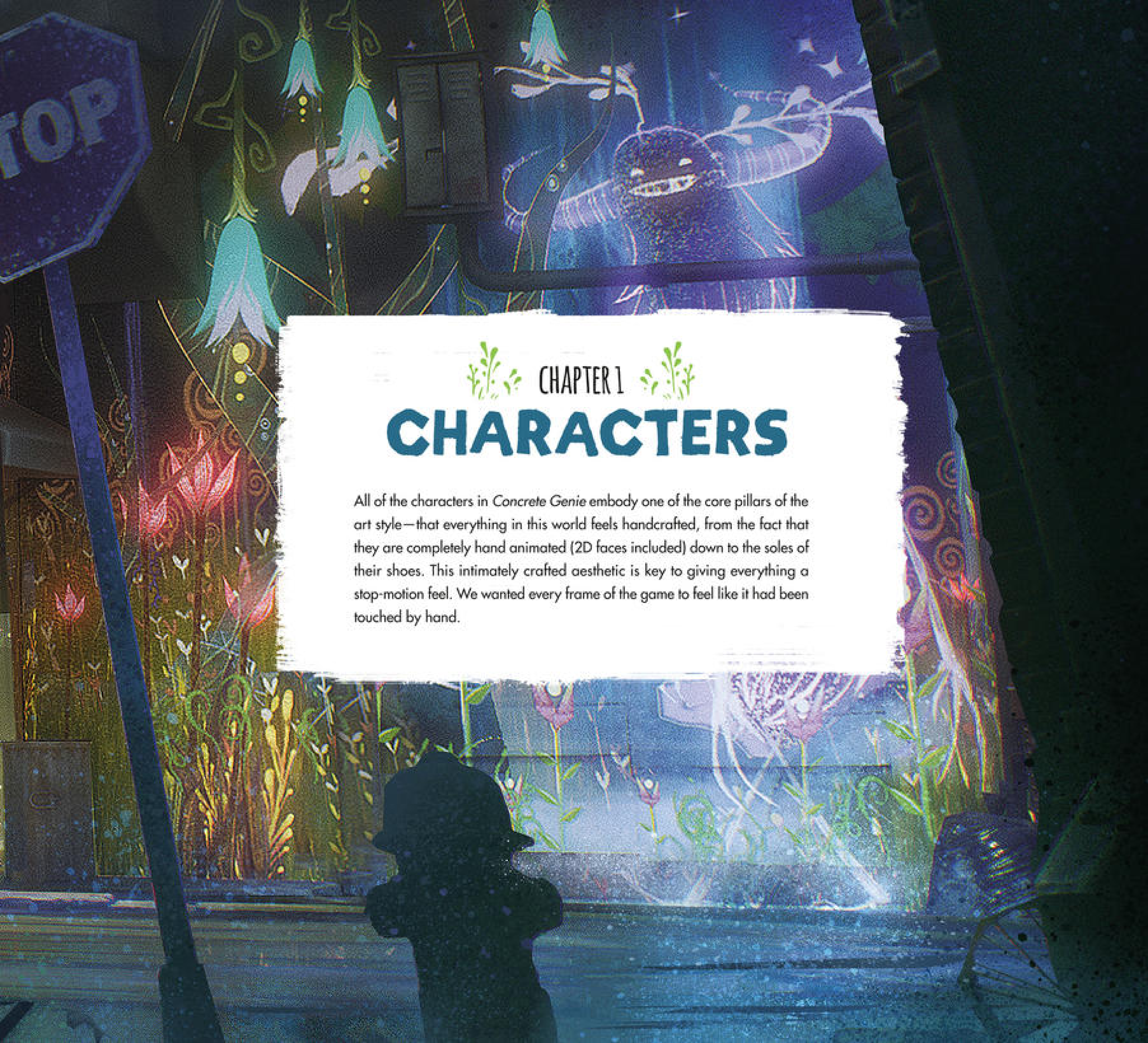


ARTIST MATT BURDETTE

ARTIST BOB ARCHIBALD



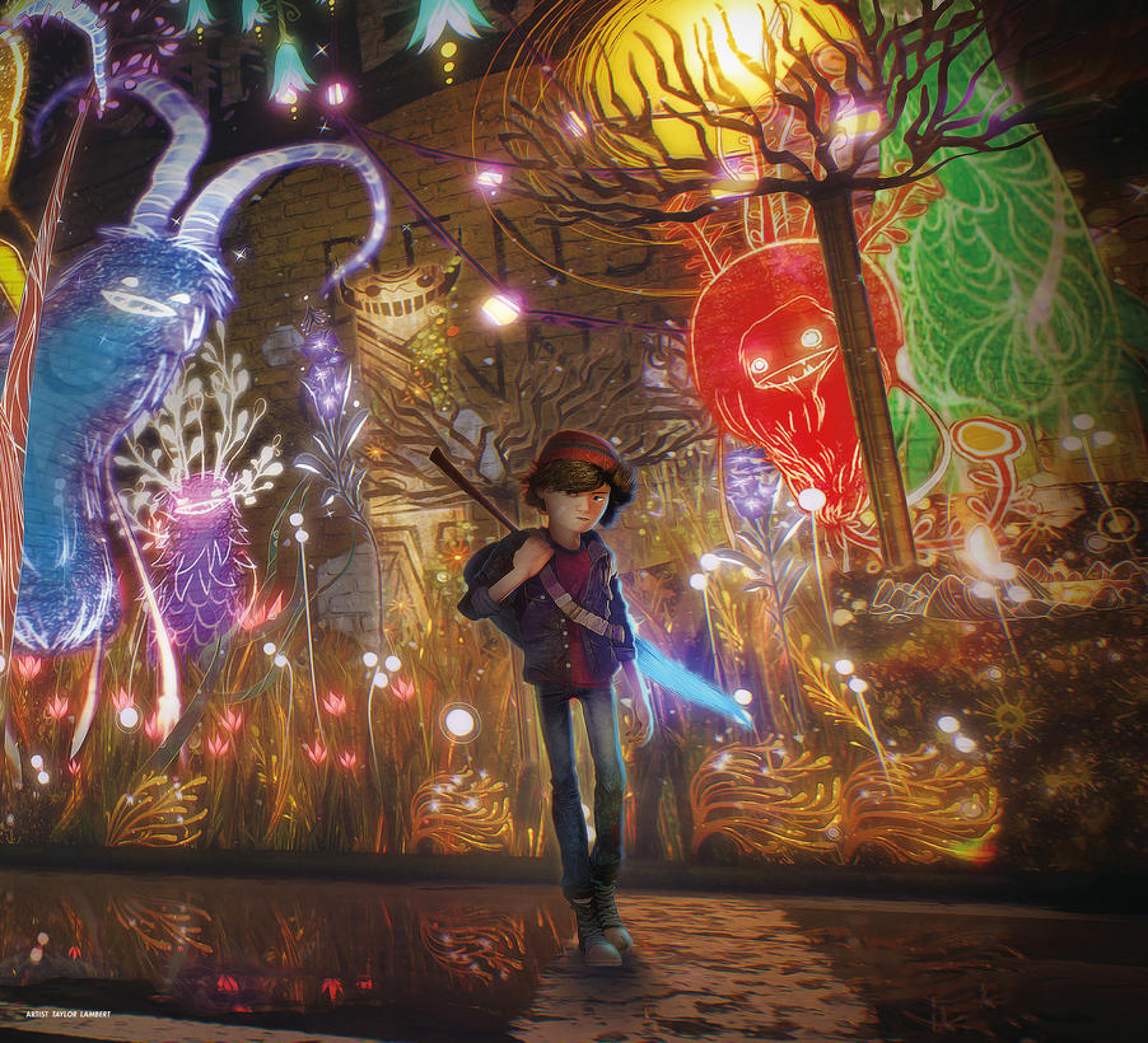
ARTIST JEFF SANGALLI



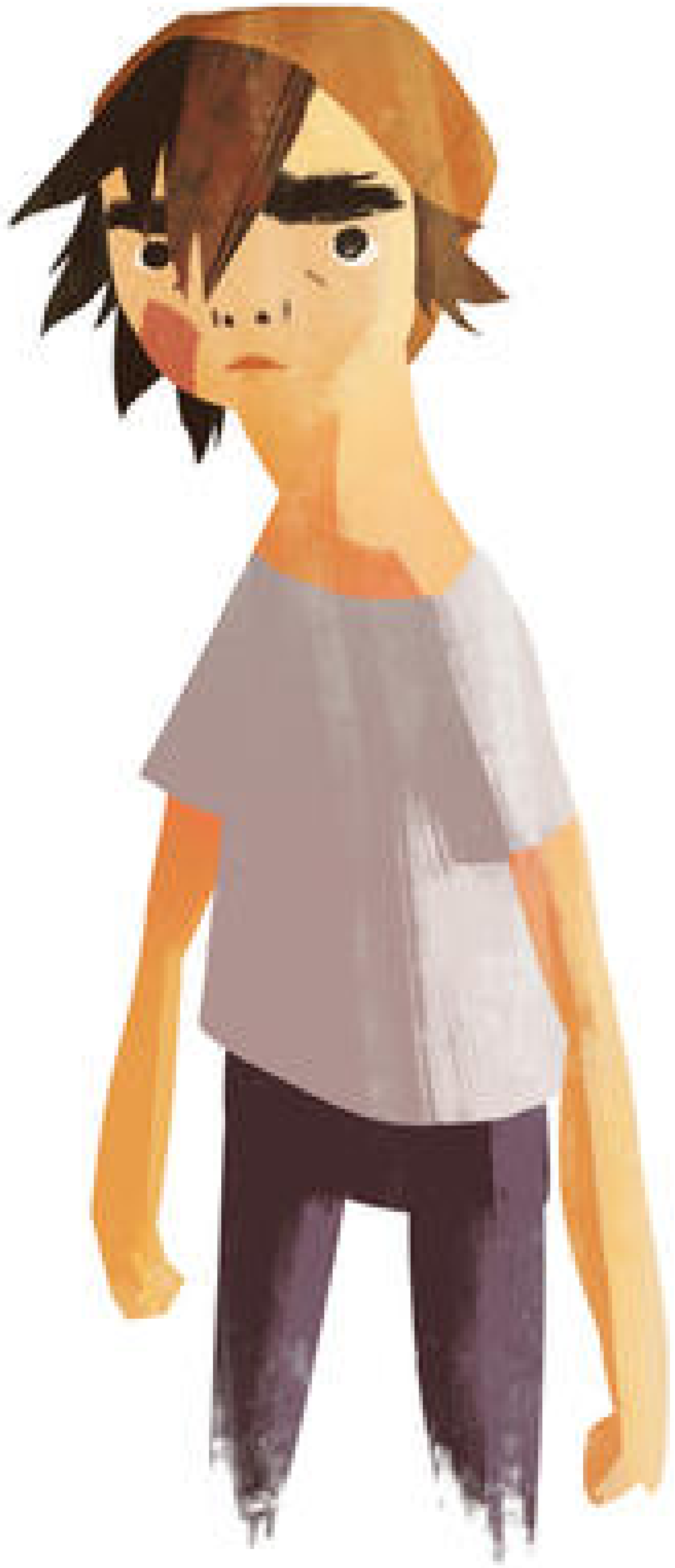
CHAPTER 1

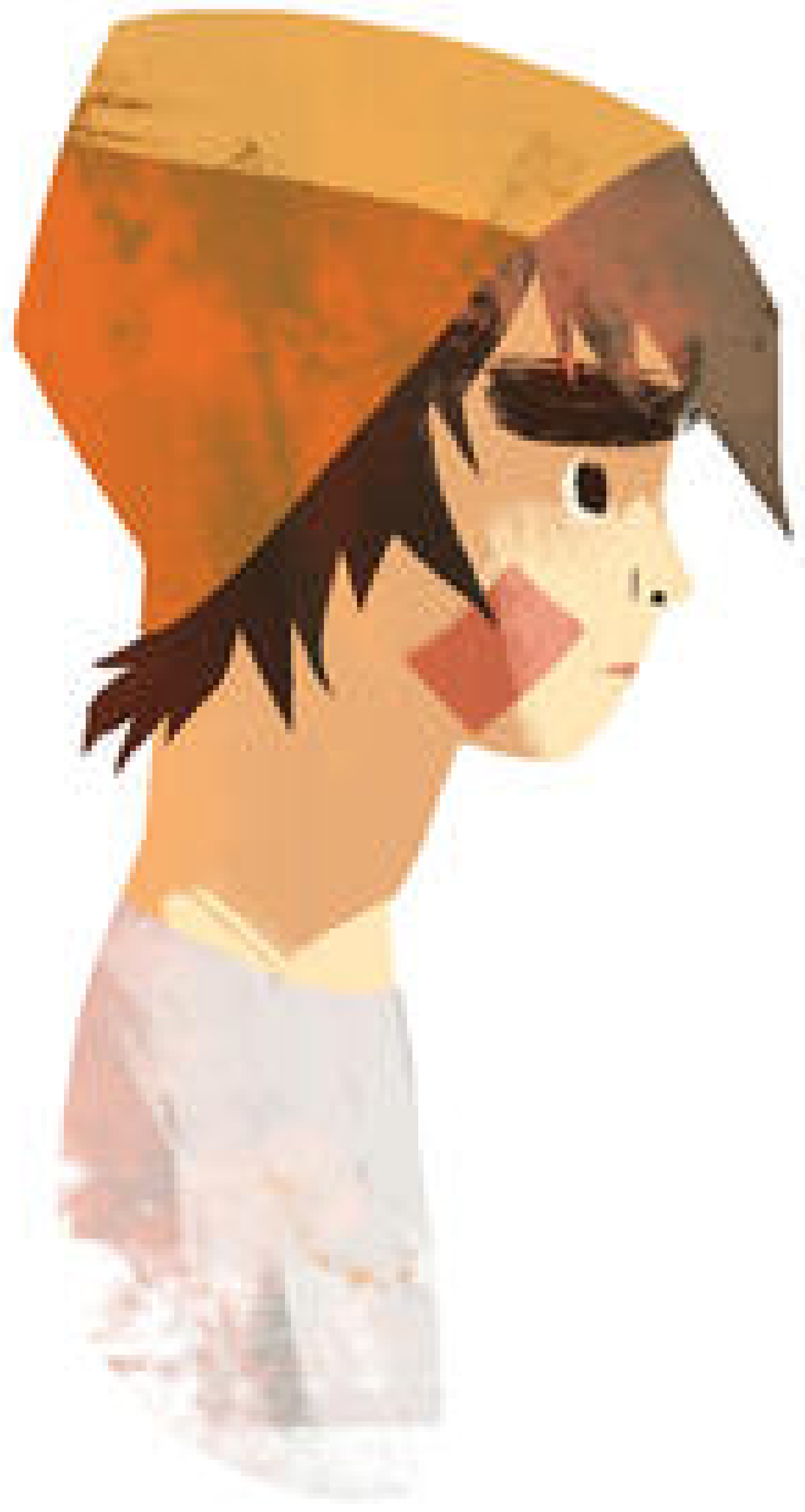
CHARACTERS

All of the characters in *Concrete Genie* embody one of the core pillars of the art style—that everything in this world feels handcrafted, from the fact that they are completely hand animated (2D faces included) down to the soles of their shoes. This intimately crafted aesthetic is key to giving everything a stop-motion feel. We wanted every frame of the game to feel like it had been touched by hand.



ARTIST TAYLOR LAMBERT





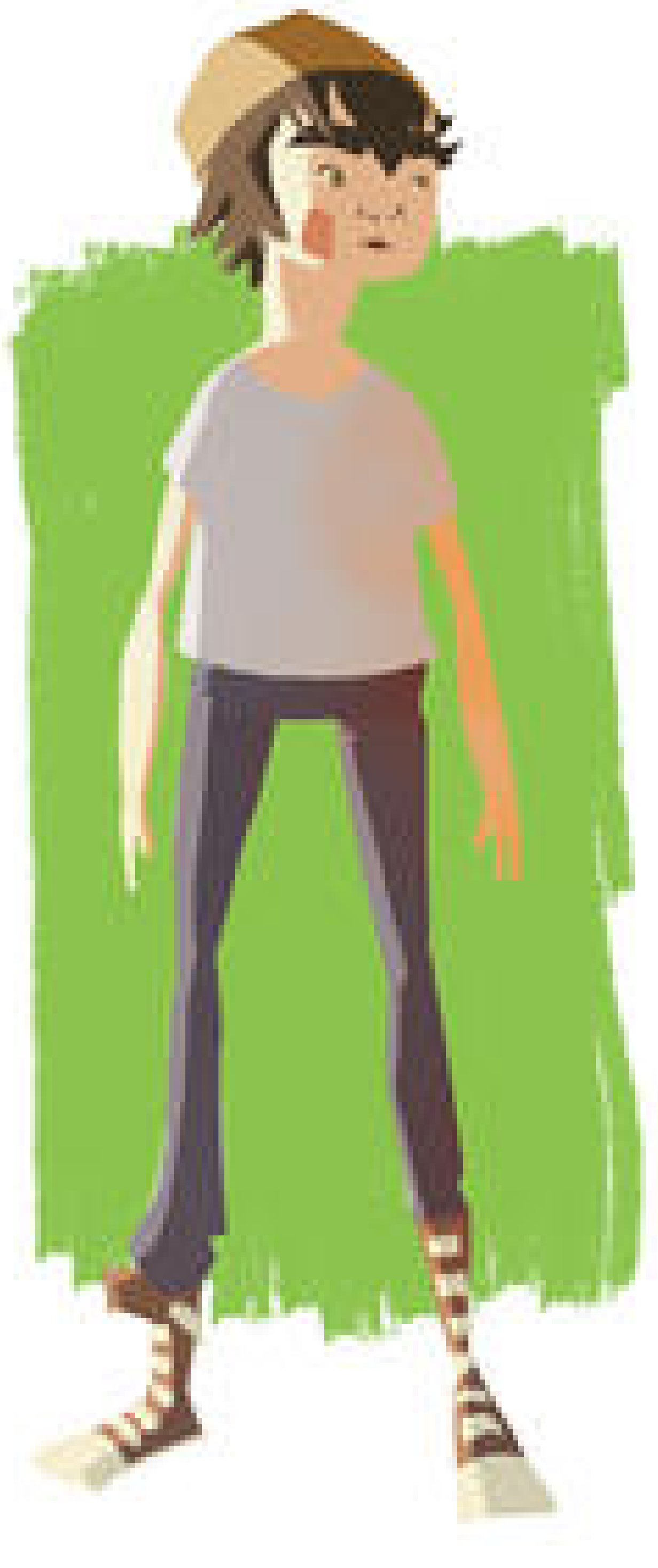
ASH

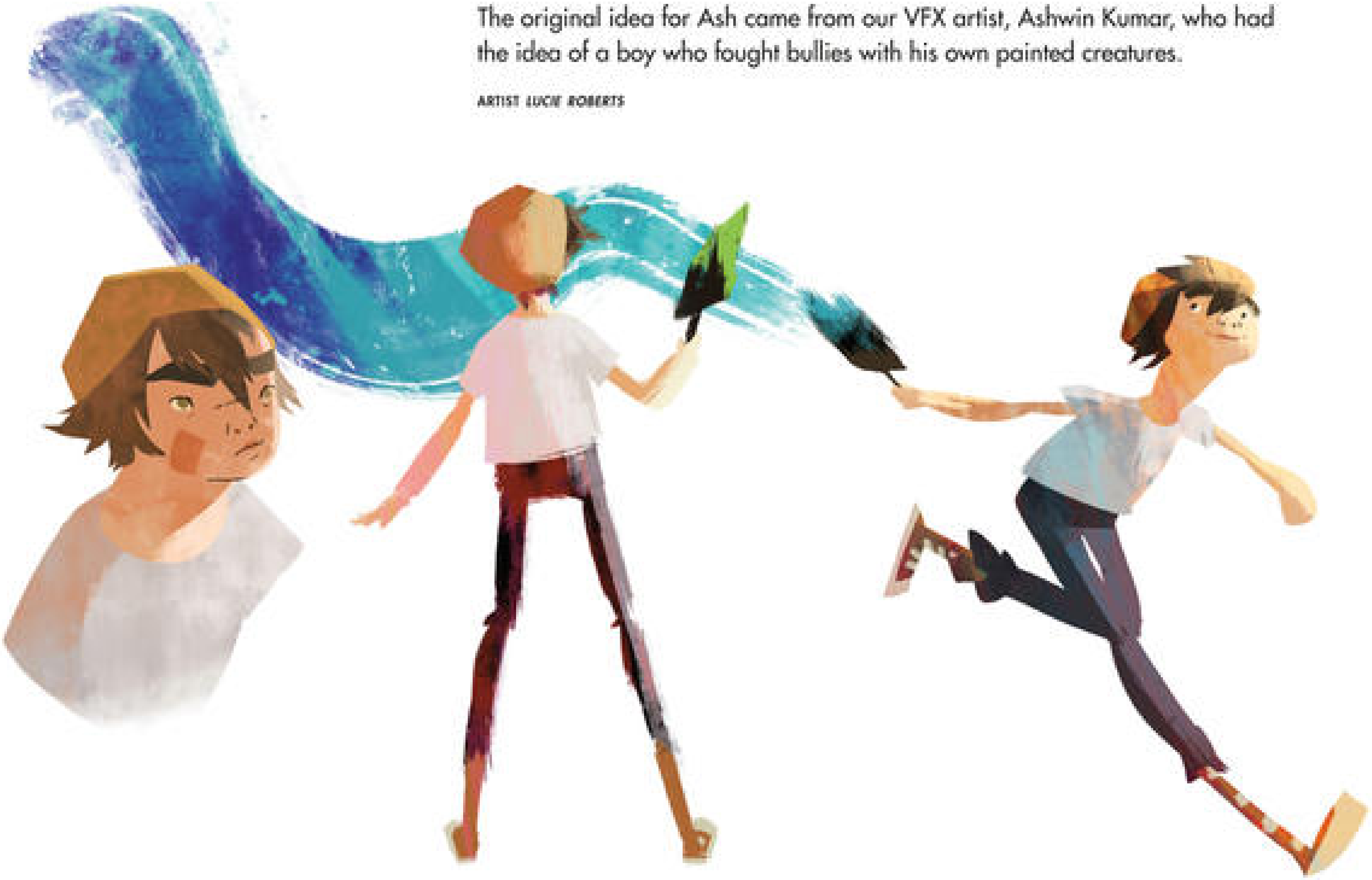
An adventurous young teen with an incredible imagination, Ash tries to heal the forgotten, neglected world around him through the power of art. At all times he strives to see the hidden good in others, and his compassion makes it hard for him to give up.

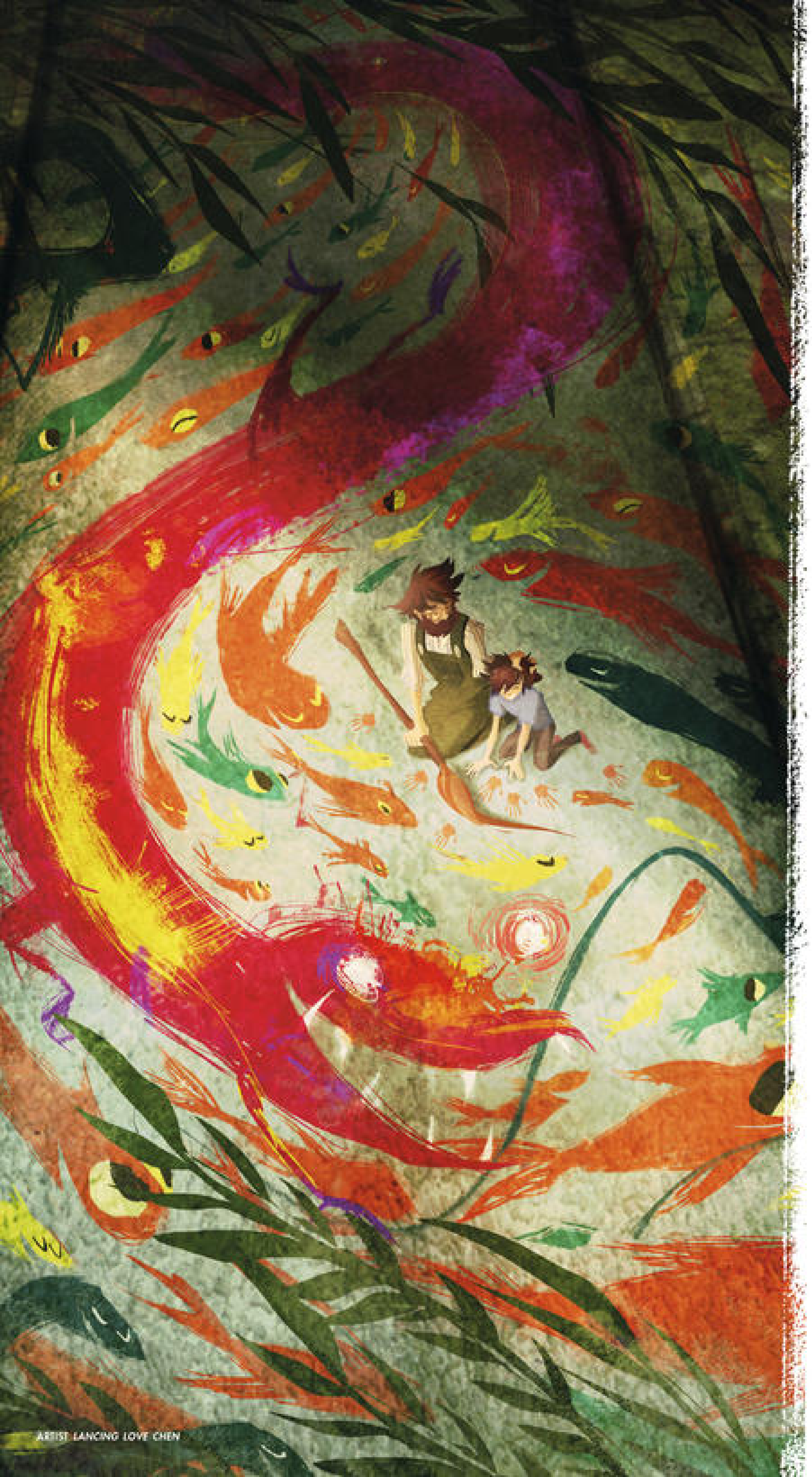
INSPIRATION

The original idea for Ash came from our VFX artist, Ashwin Kumar, who had the idea of a boy who fought bullies with his own painted creatures.

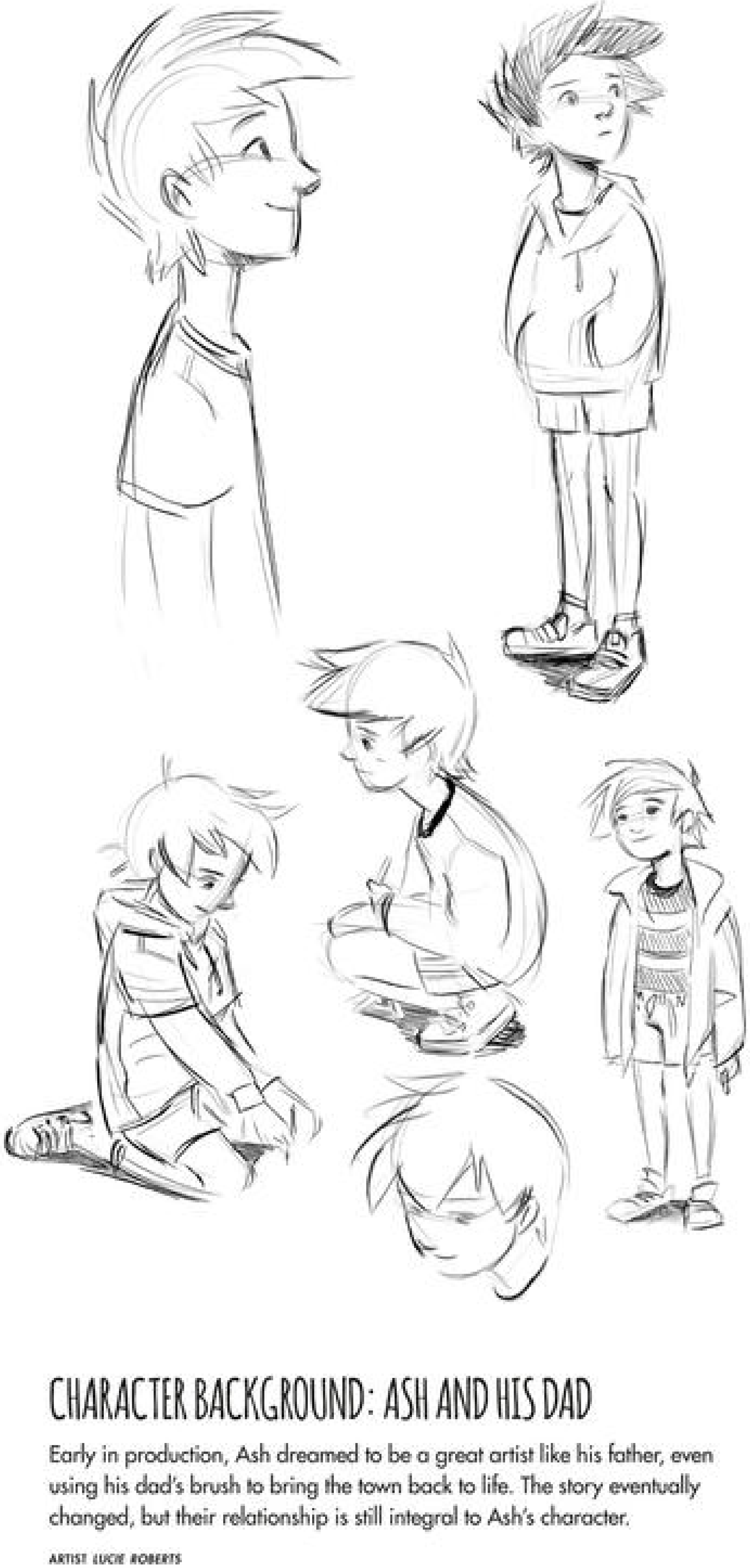
ARTIST *LUCIE ROBERTS*







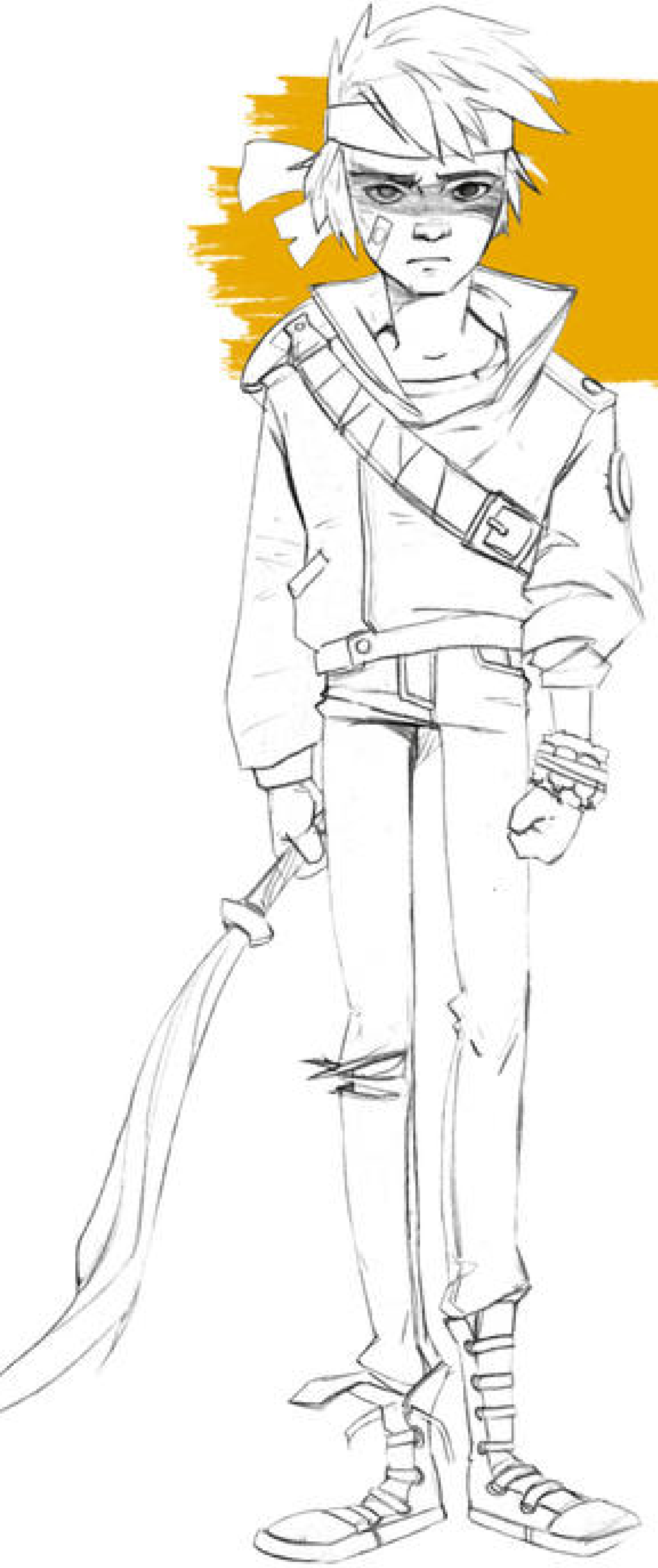
ARTIST *LANCING LOVE CHEN*

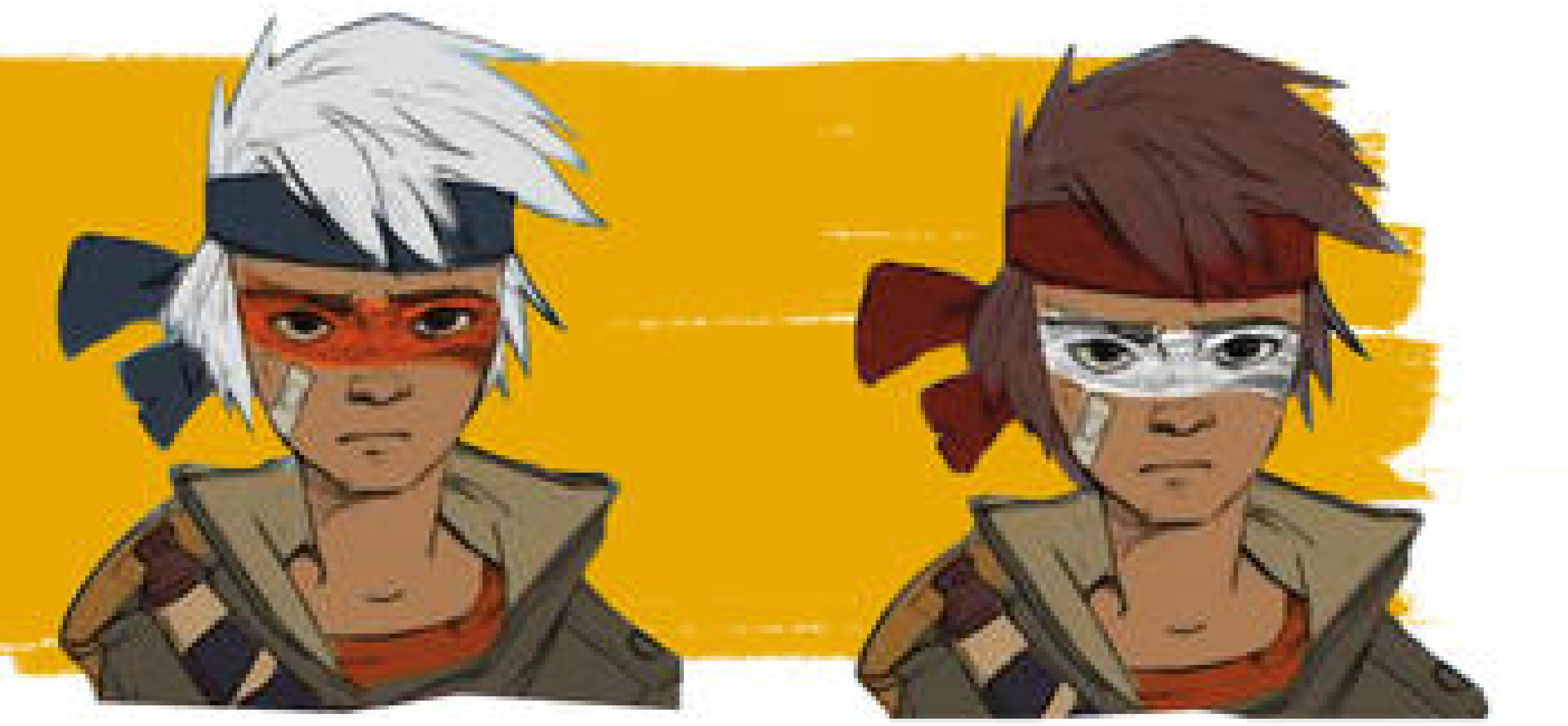


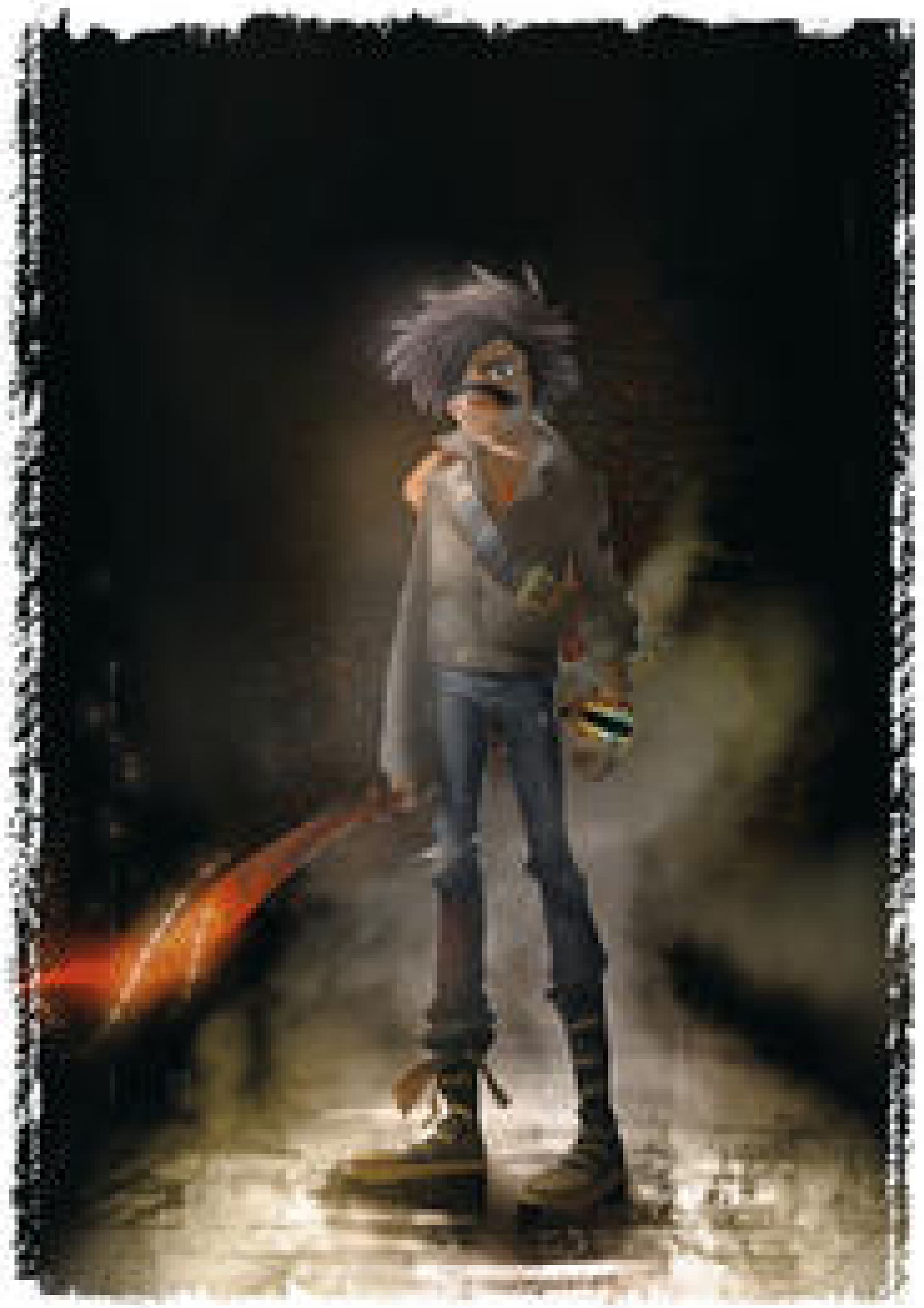
CHARACTER BACKGROUND: ASH AND HIS DAD

Early in production, Ash dreamed to be a great artist like his father, even using his dad's brush to bring the town back to life. The story eventually changed, but their relationship is still integral to Ash's character.

ARTIST *LUCIE ROBERTS*



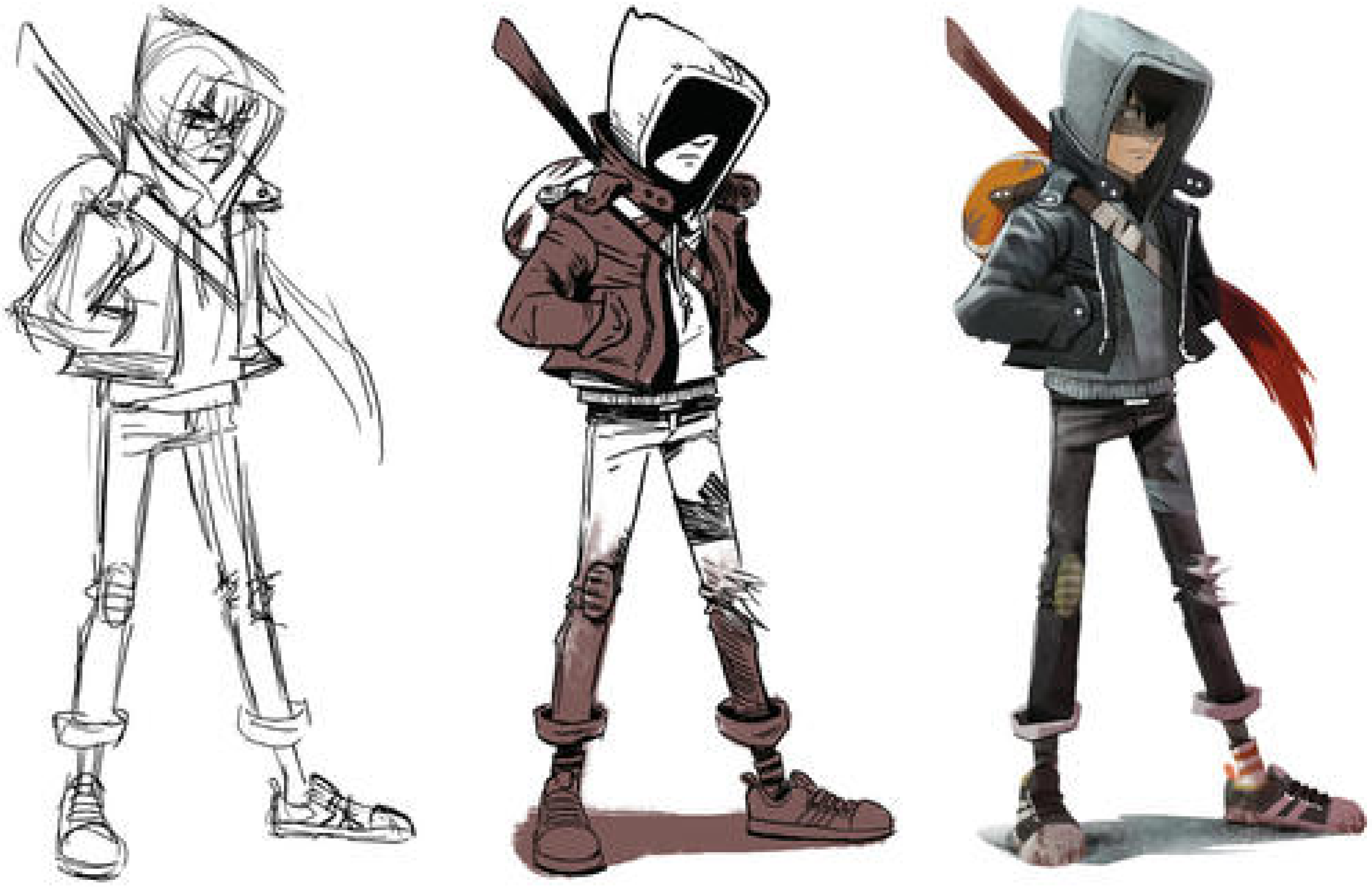




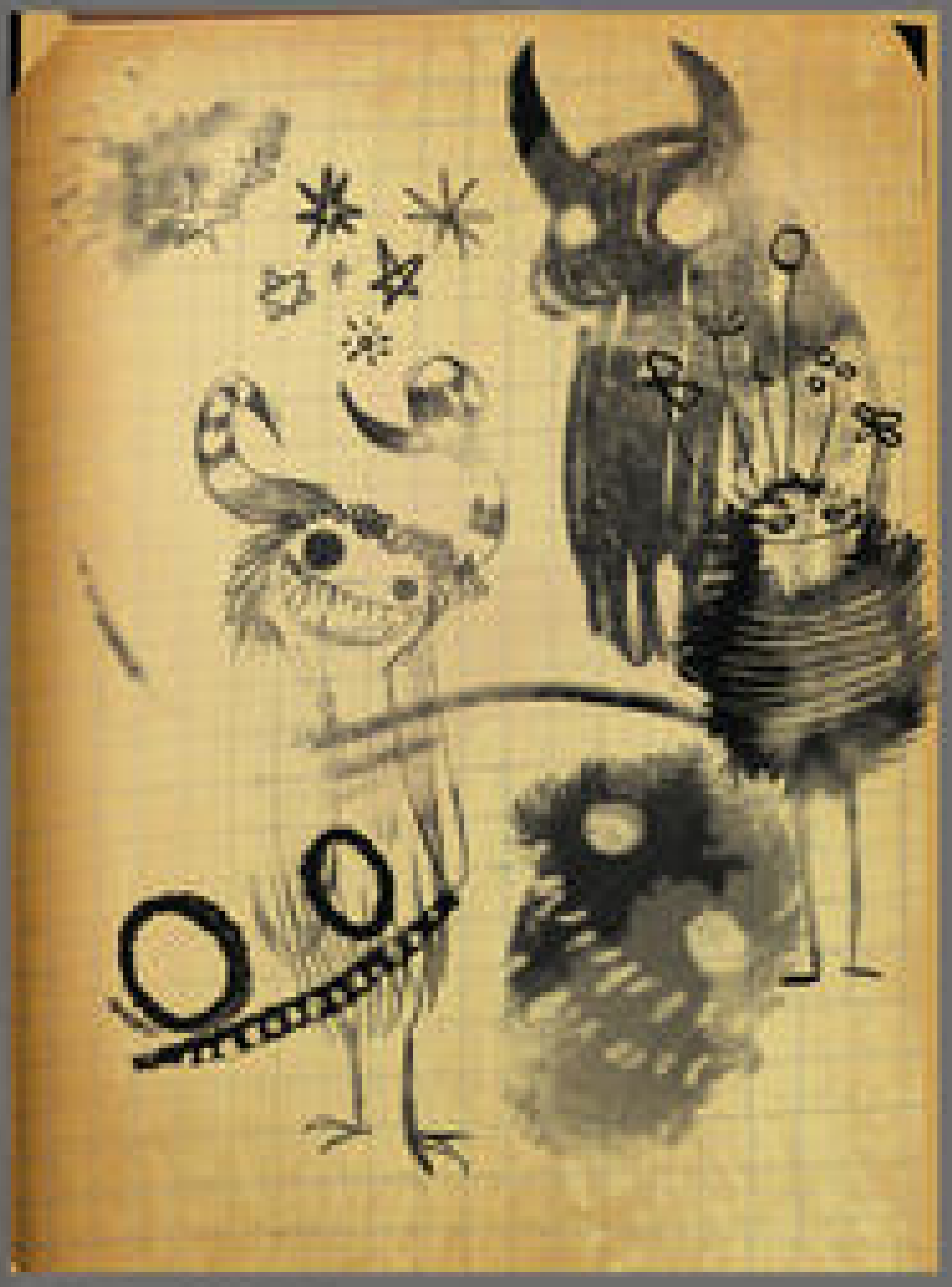
ARTIST LUCIE ROBERTS (THIS PAGE)

EARLY CONCEPTS BY: LUCIE ROBERTS

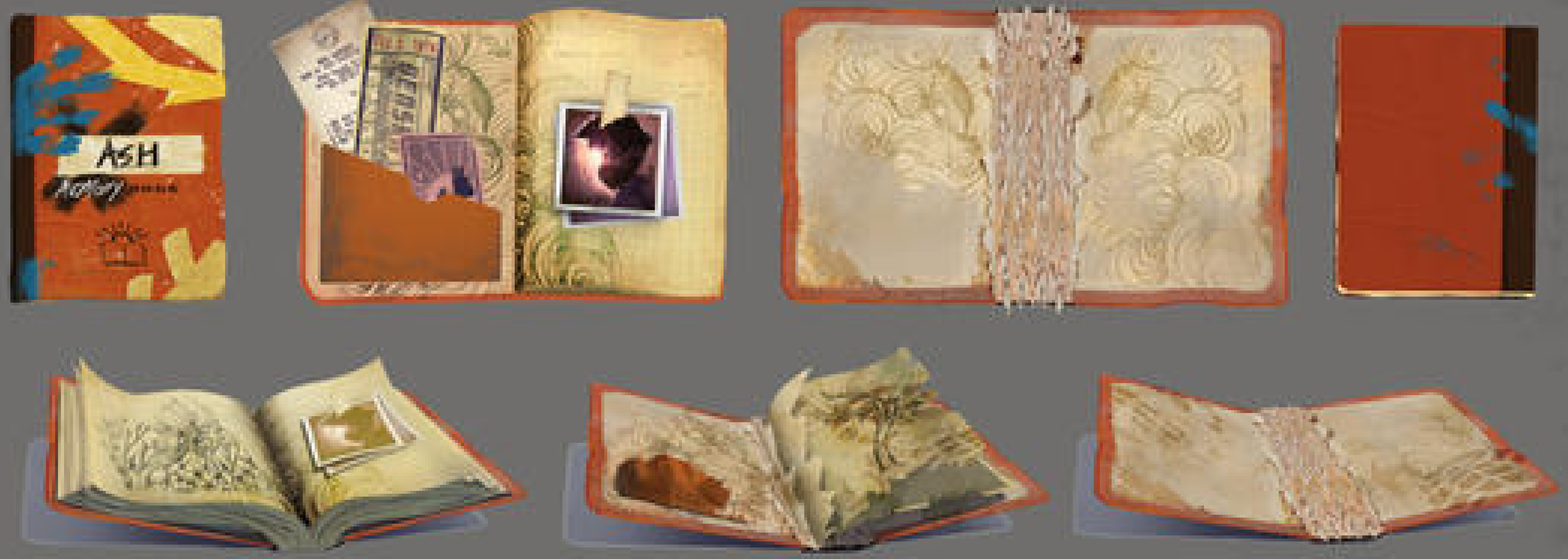
We were trying to figure out who Ash is. How old is he? How tough or vulnerable is he? How does he move through the world?



For the journey Ash needed to take, it was more important to show his openness, kindness, and inner wisdom. Ash is an old soul.



ARTIST LUCIE ROBERTS



ARTIST TAYLOR LAMBERT

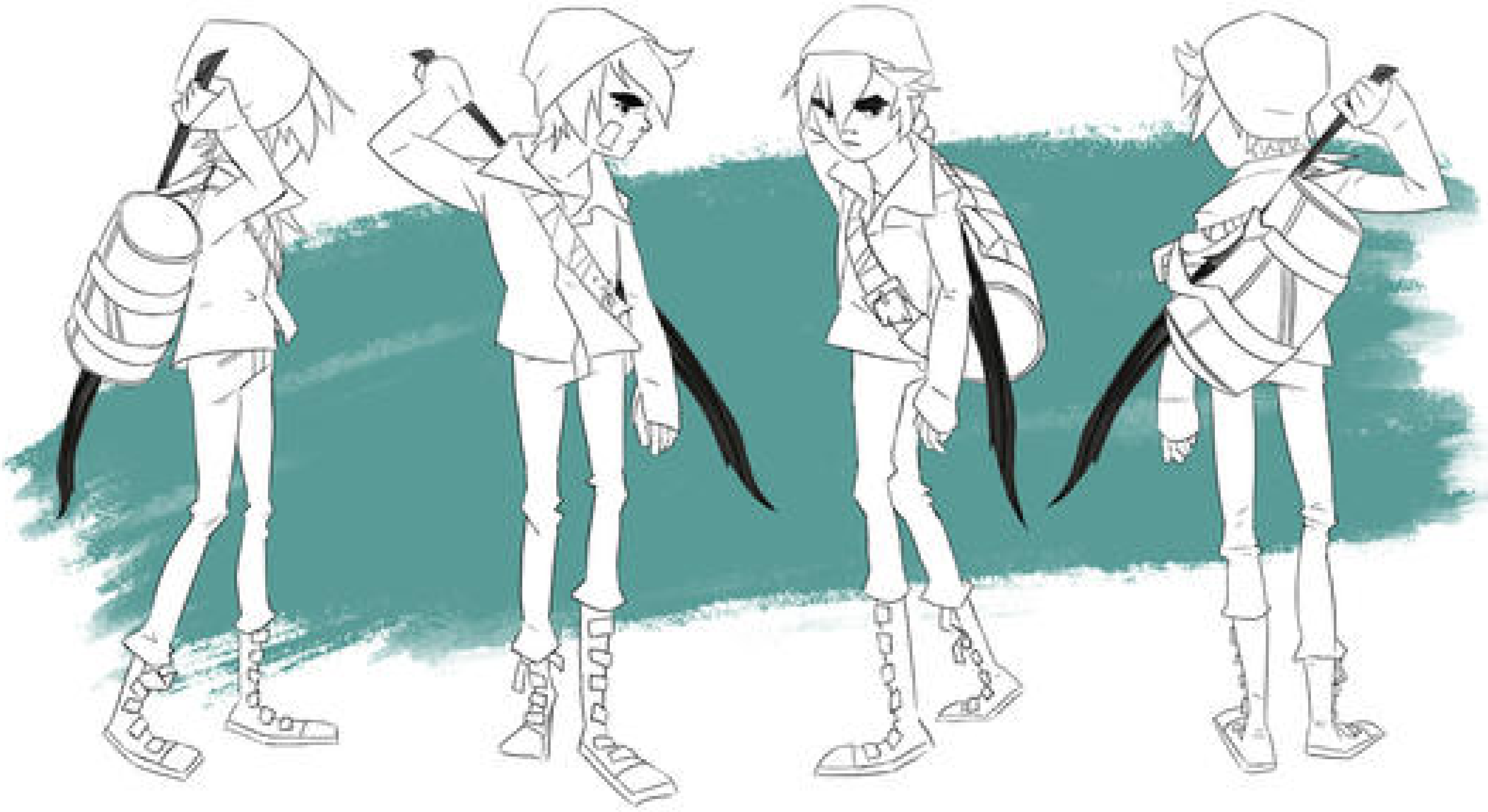
ASH'S JOURNAL

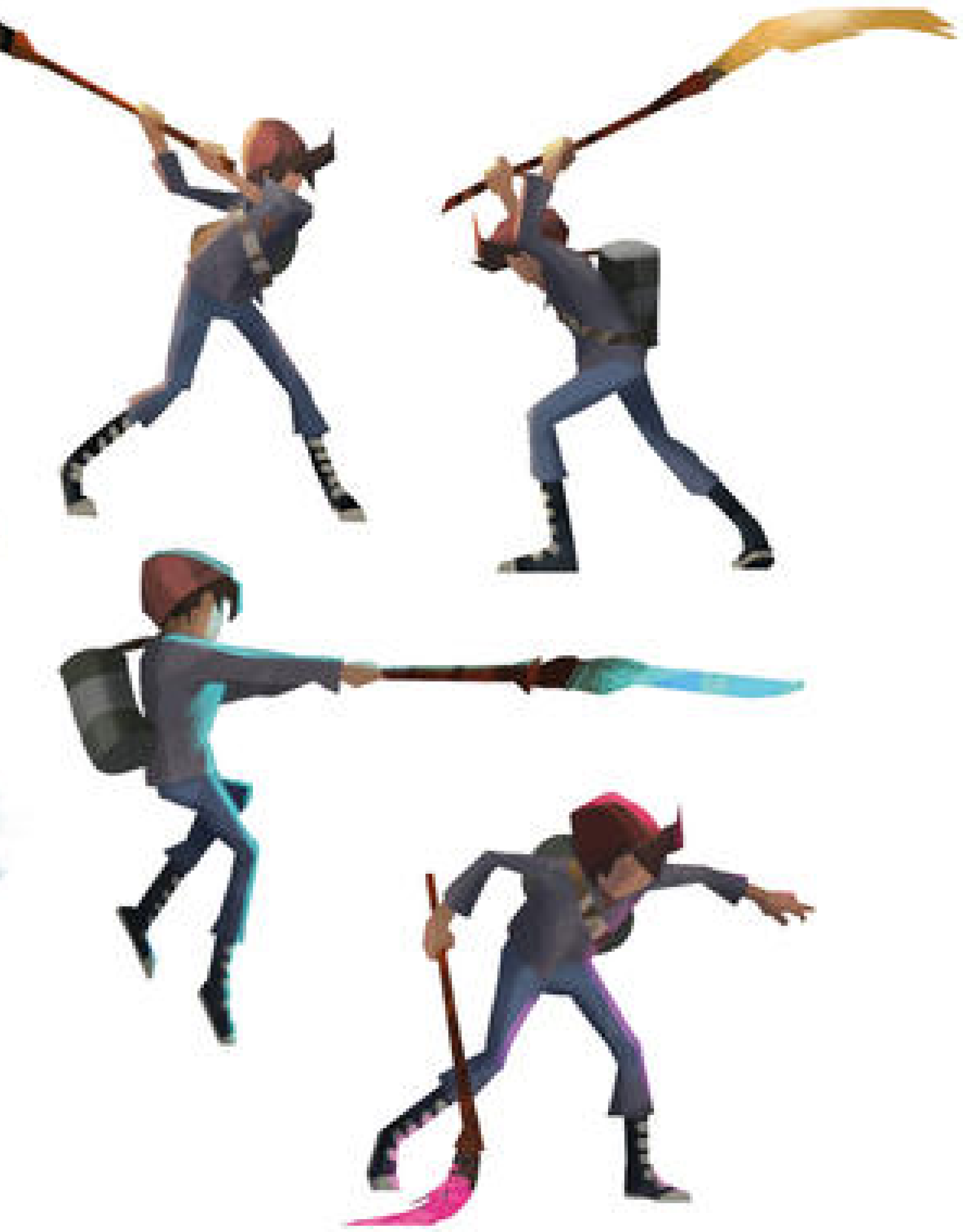
The sketchbook became a great way for us to show lots of different dimensions to Ash's character, and also to help chart the player's course through the game (as Ash). It has a key part to play in every pillar of the game (narrative, gameplay, world, and character) so it received many revisions and lots of care.

FINAL CONCEPT

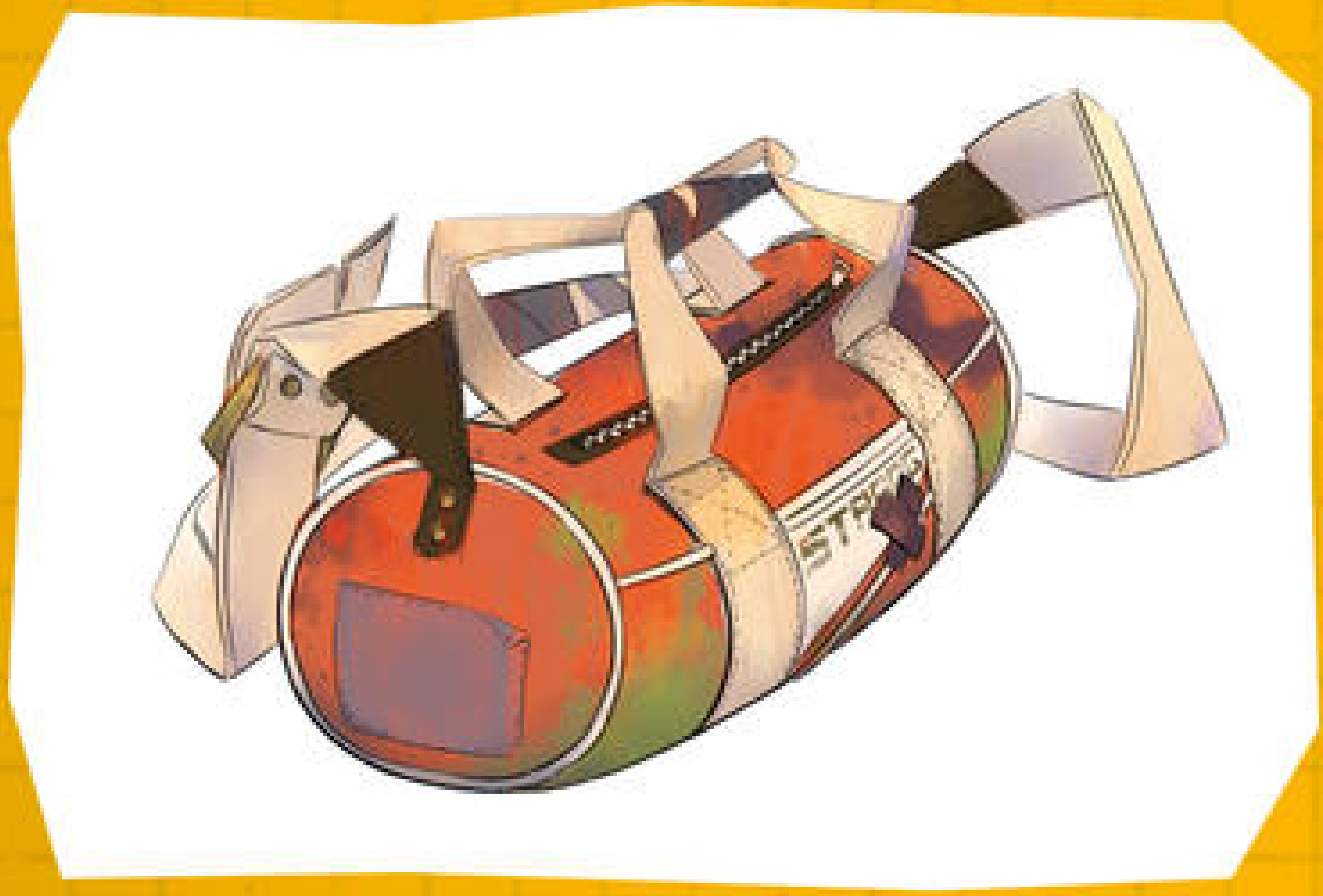
This turn-around (*below*) helped us come to a consensus on Ash. We could now model him and turn him into a fully realized 3D character.

ARTIST LUCIE ROBERTS (LEFT) ARTIST TAYLOR LAMBERT (RIGHT)





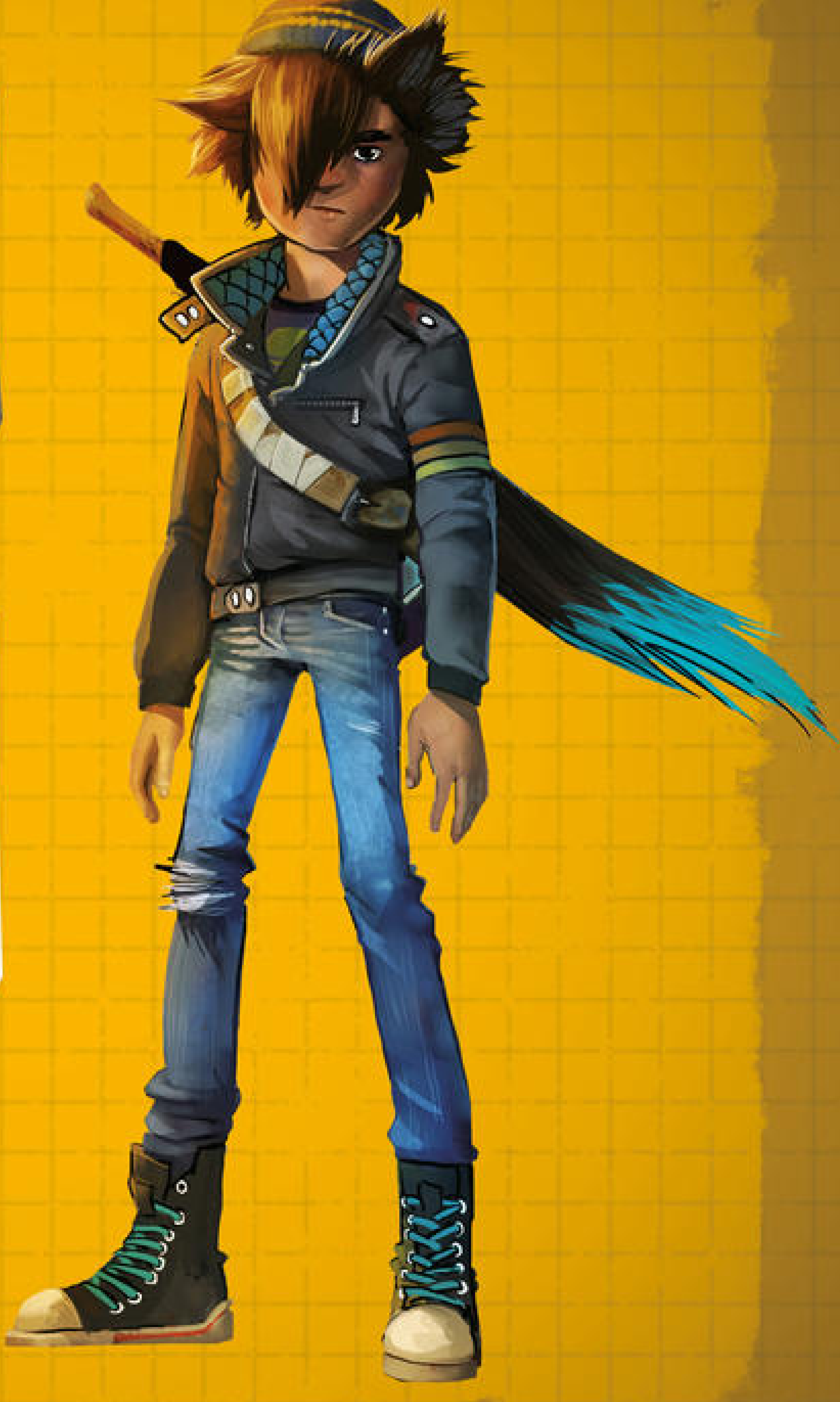
ARTIST JEFF SANGALLI

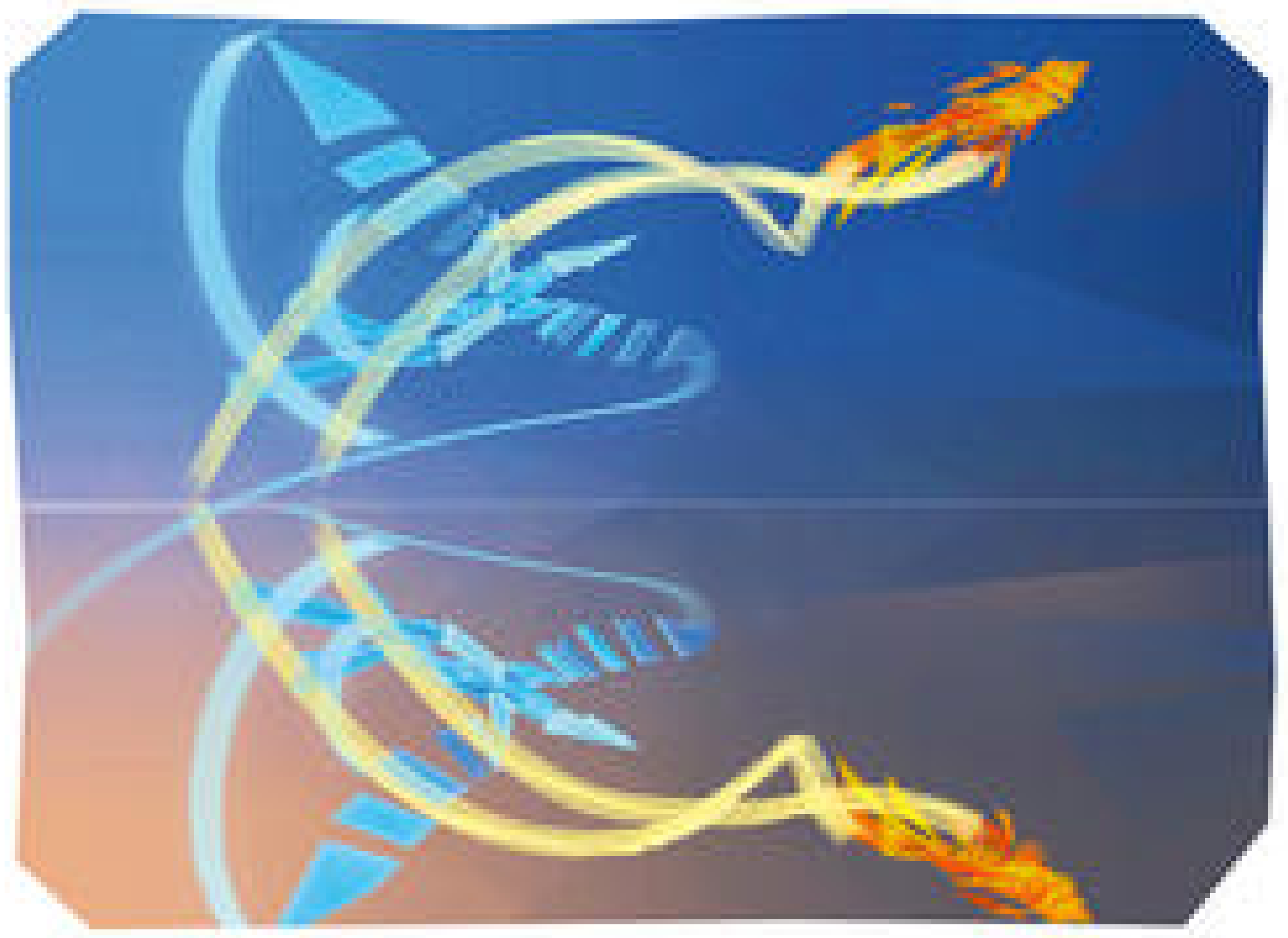


ARTIST LUCIE ROBERTS

ACCESSORIES AND BRUSHES

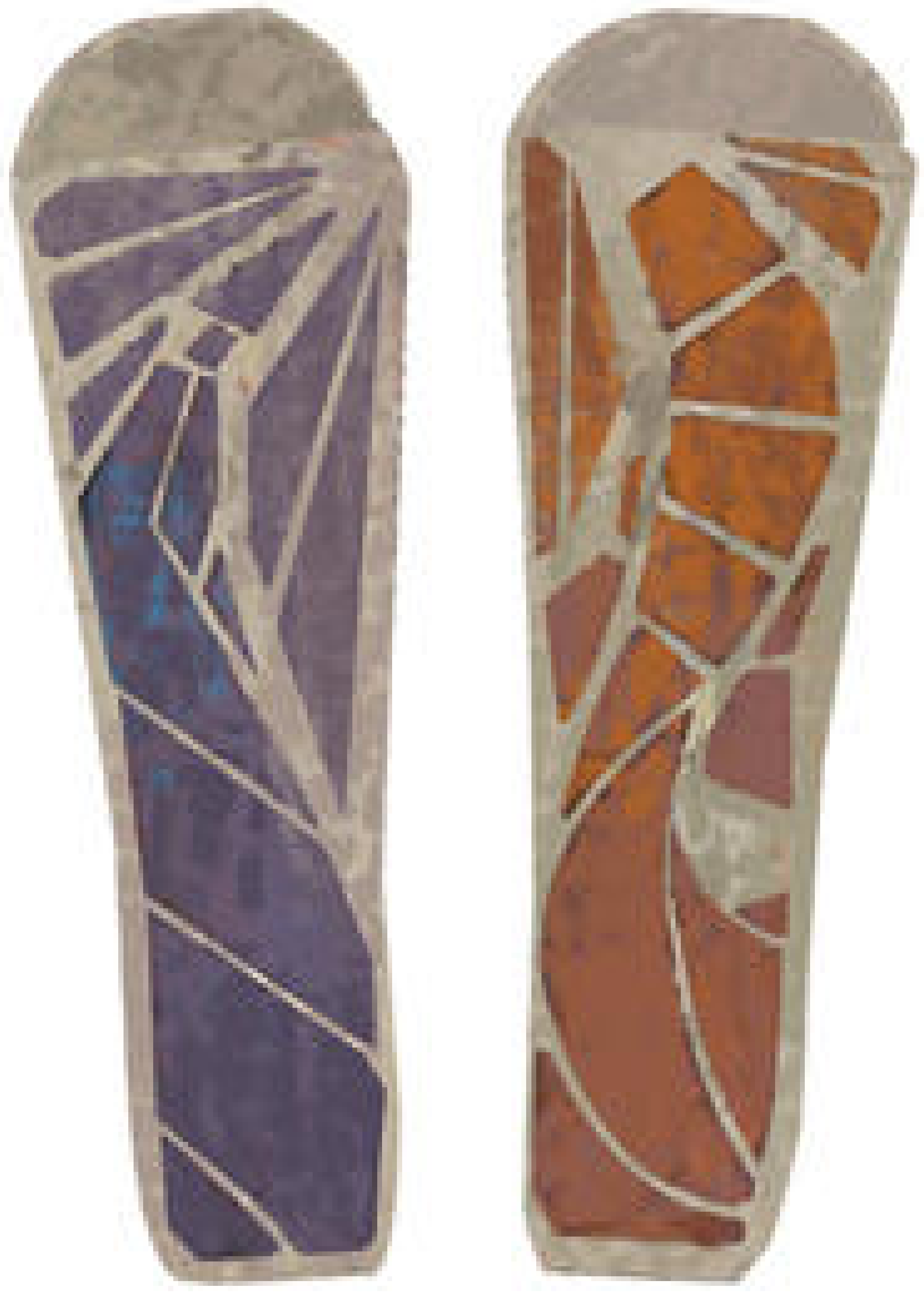
Ash's duffel bag was designed to be the perfect holster for his magic paintbrush, which had to be reachable to him like a sword; the wear and tear on all of his accessories make them feel personal and well loved.





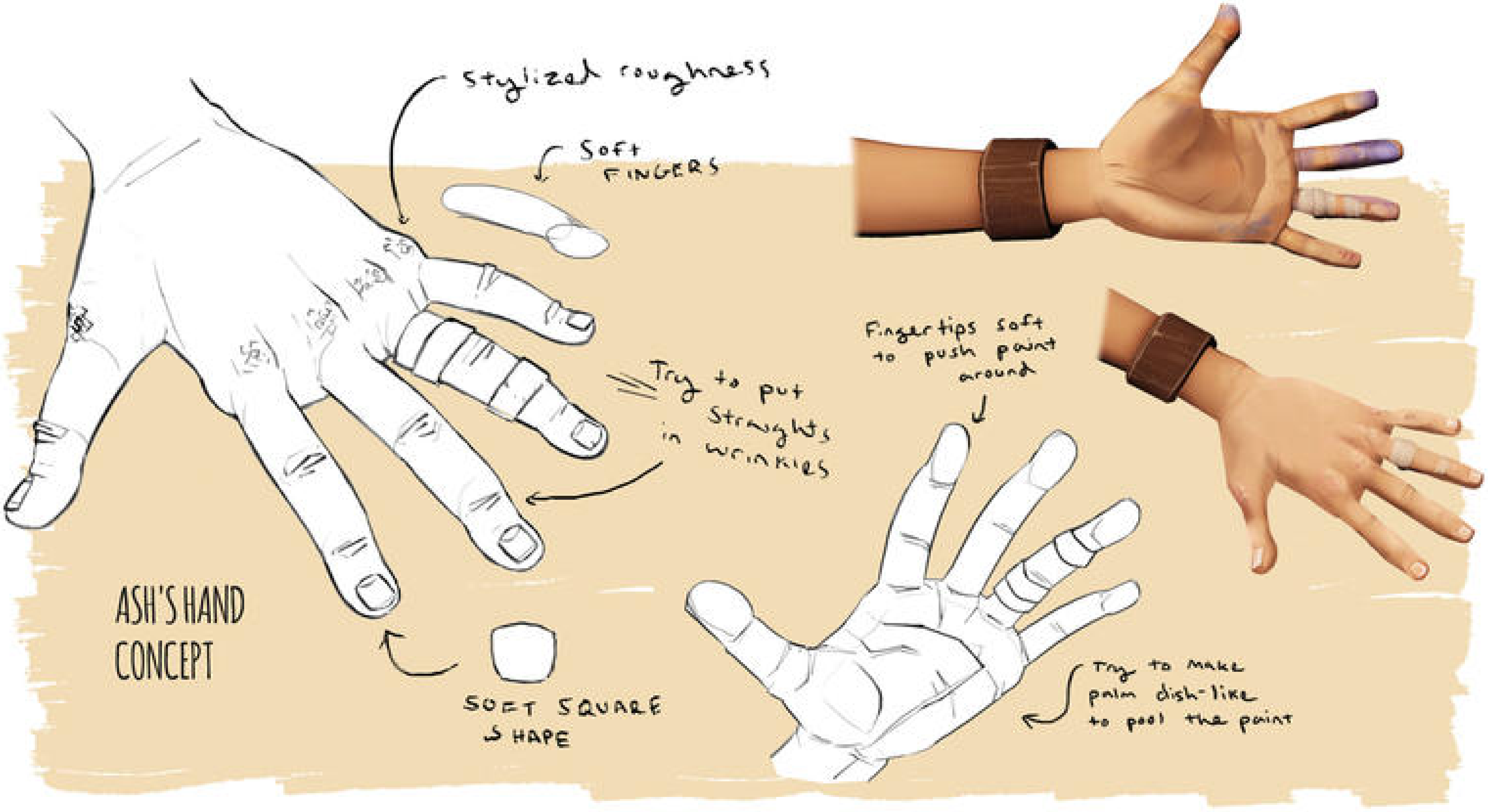
ENTWINED

In the tread of Ash's shoes, we hid designs of Fish and Bird from our first game *Entwined* (a small homage and Easter egg for Pixelopus fans).

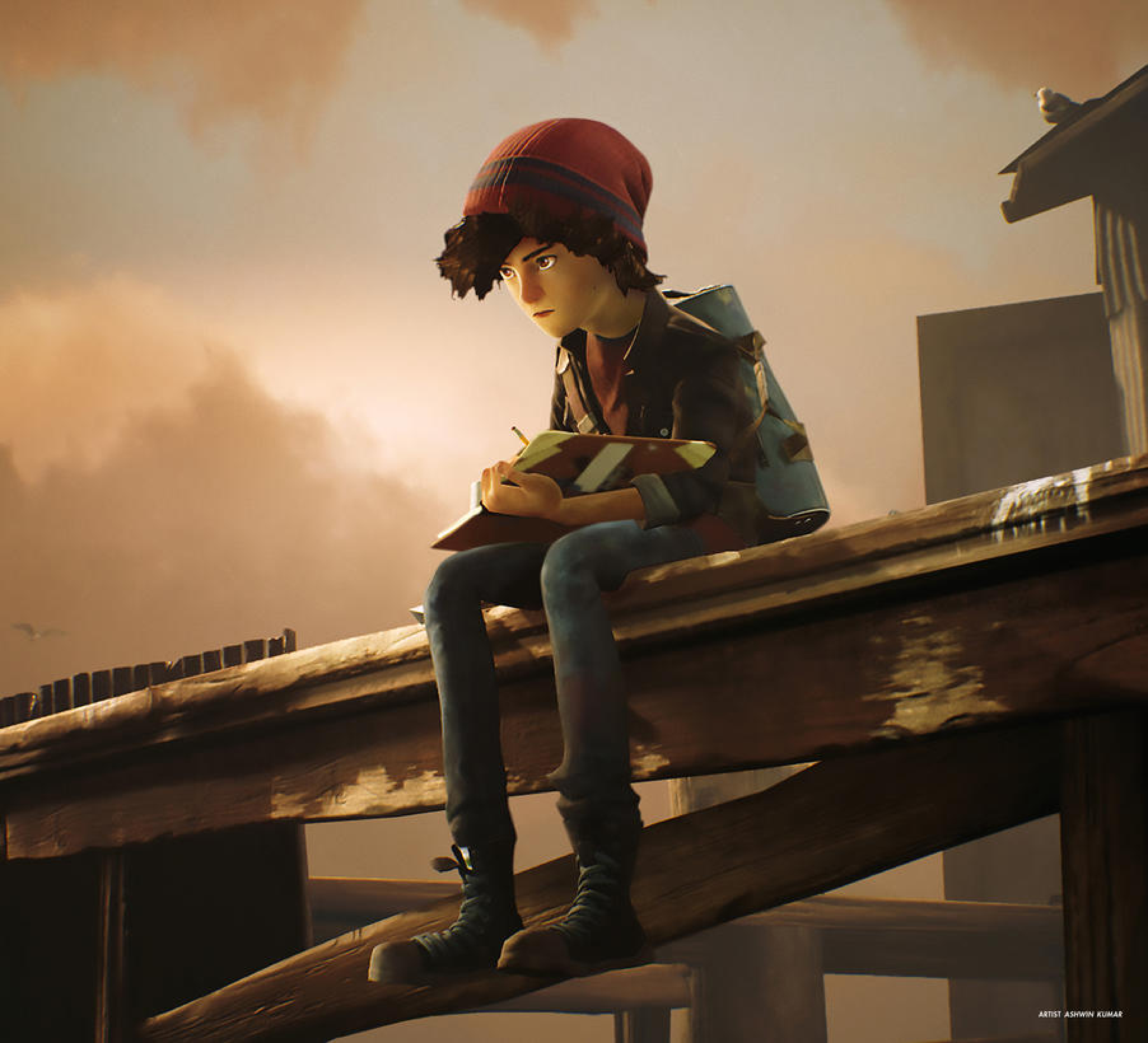


ARTIST LUCIE ROBERTS (THIS PAGE)

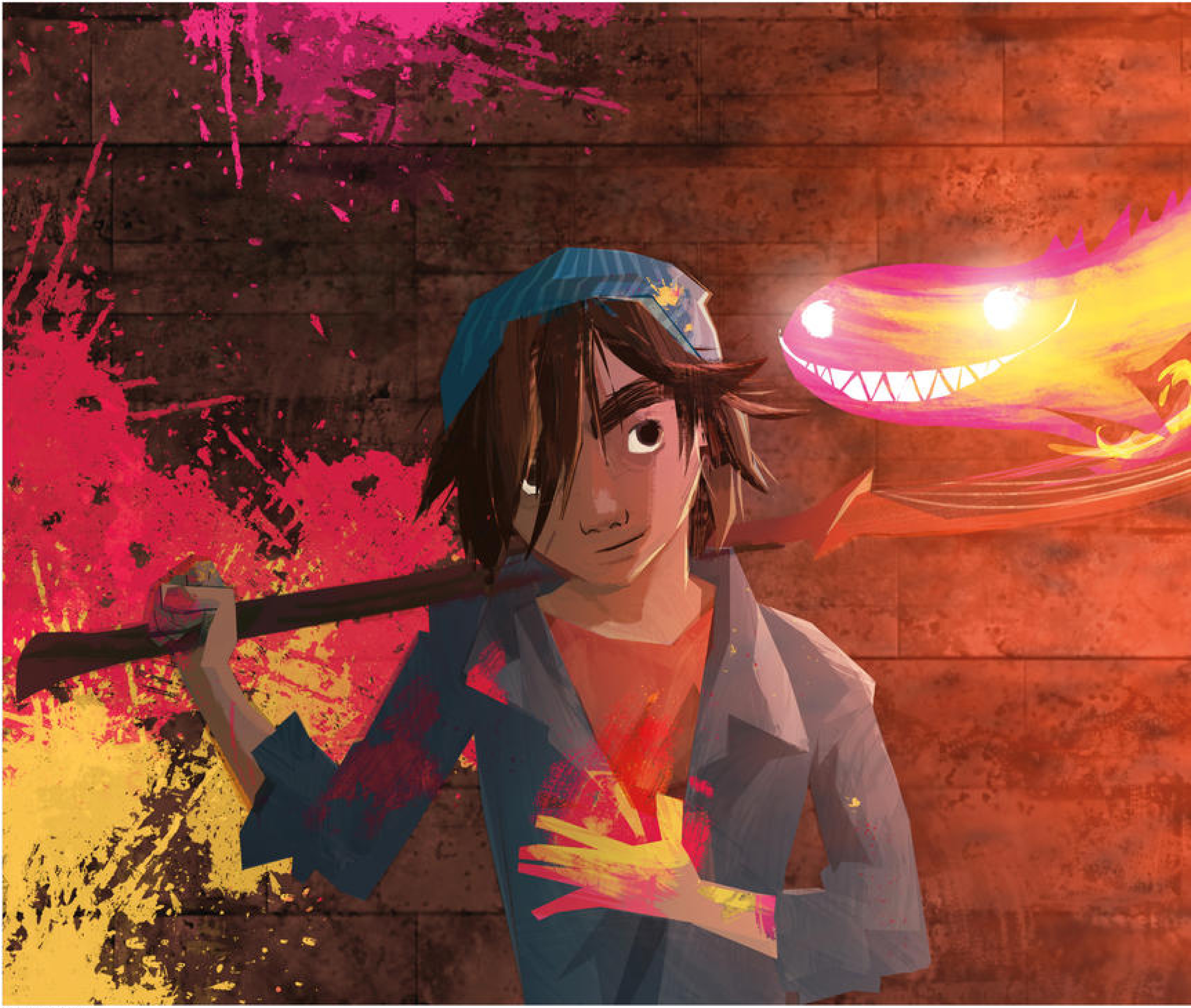
ASH'S HAND CONCEPT



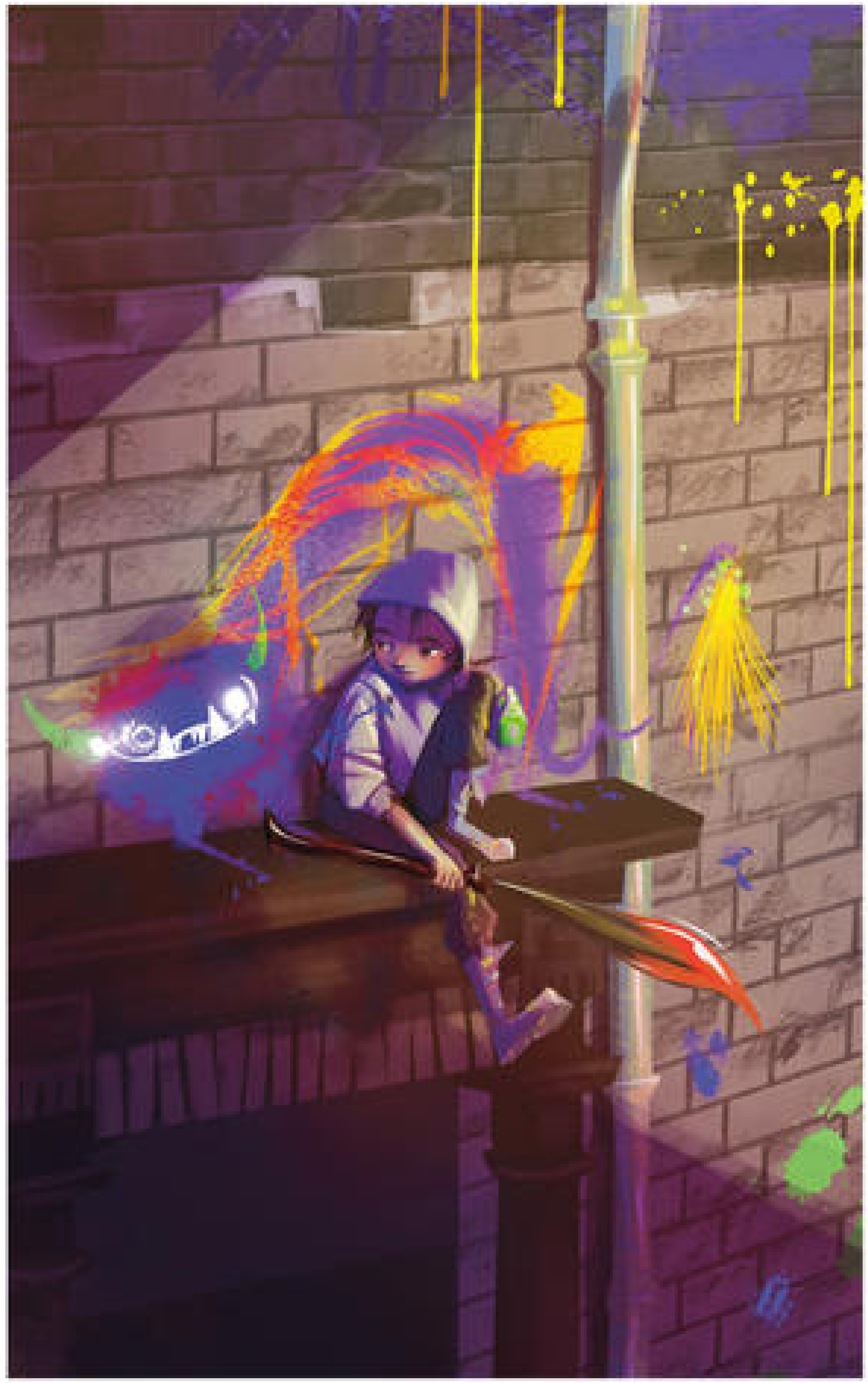
Stylized roughness
Soft FINGERS
Try to put Straights in wrinkles
SOFT SQUARE SHAPE
Fingertips soft to push paint around
Try to make palm dish-like to pool the paint



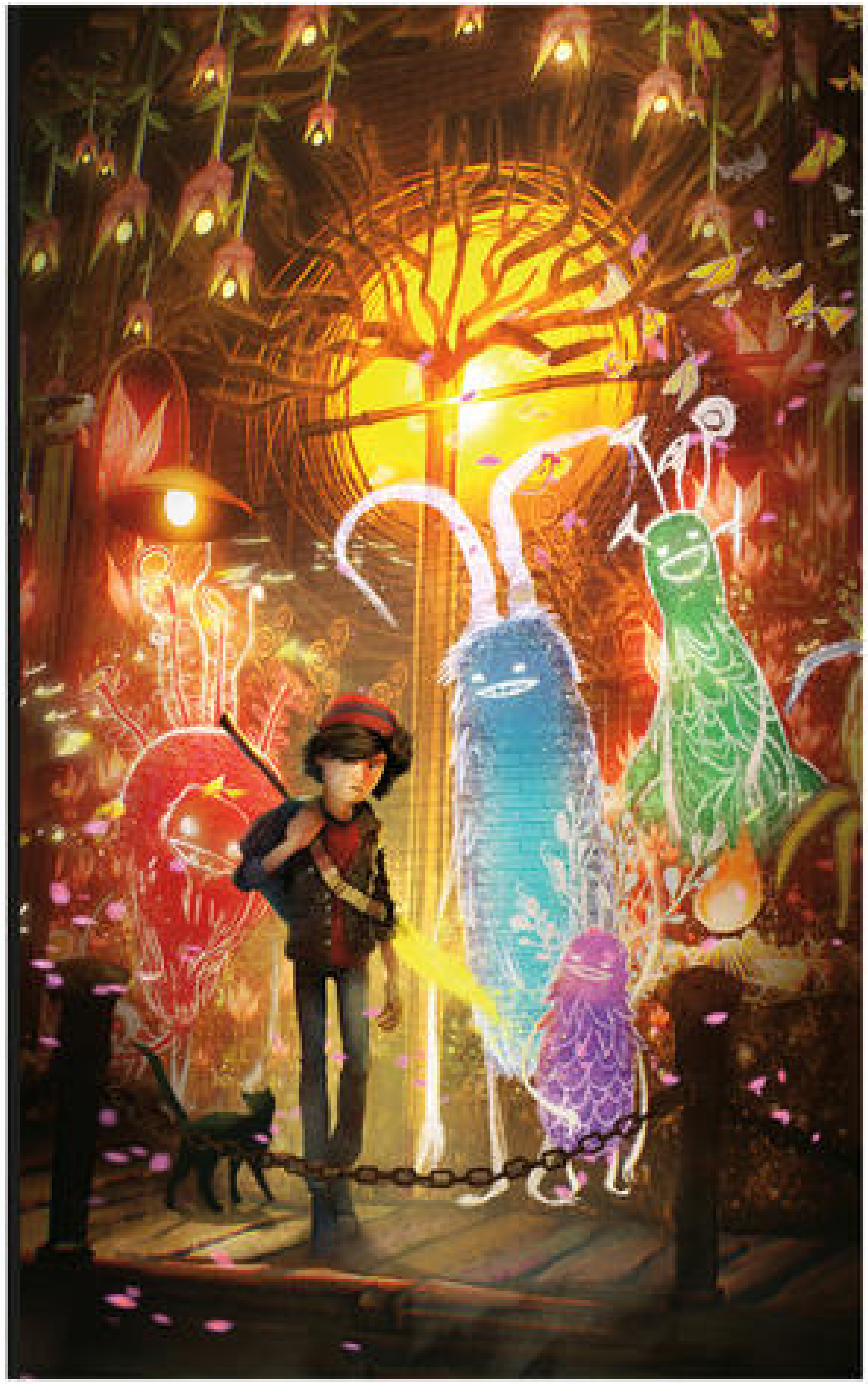
ARTIST ASHWIN KUMAR



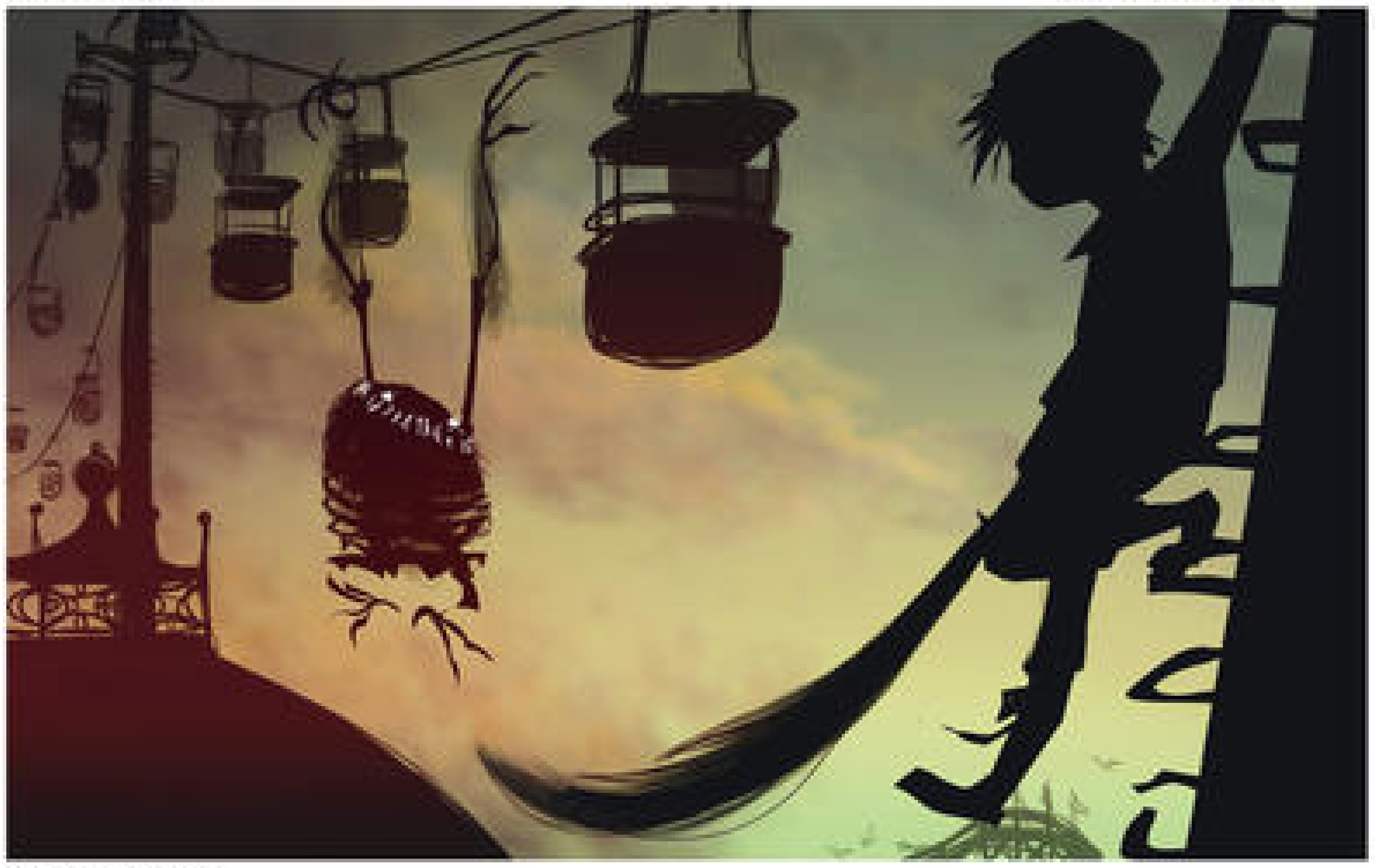
ARTIST *BECKY ROBERTS*



ARTIST *BECKY ROBERTS*



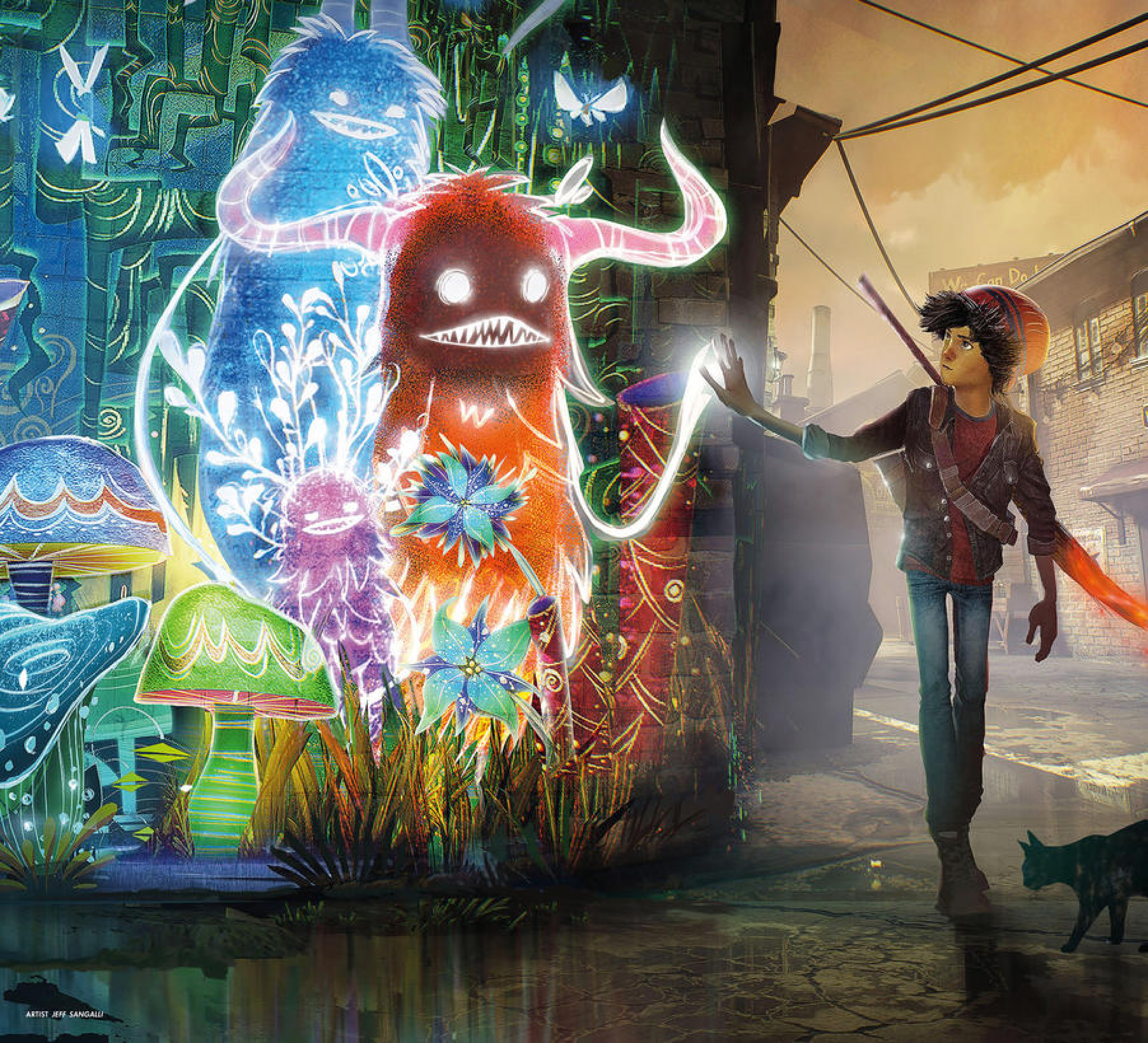
ARTIST *JEFF SANGALLI*



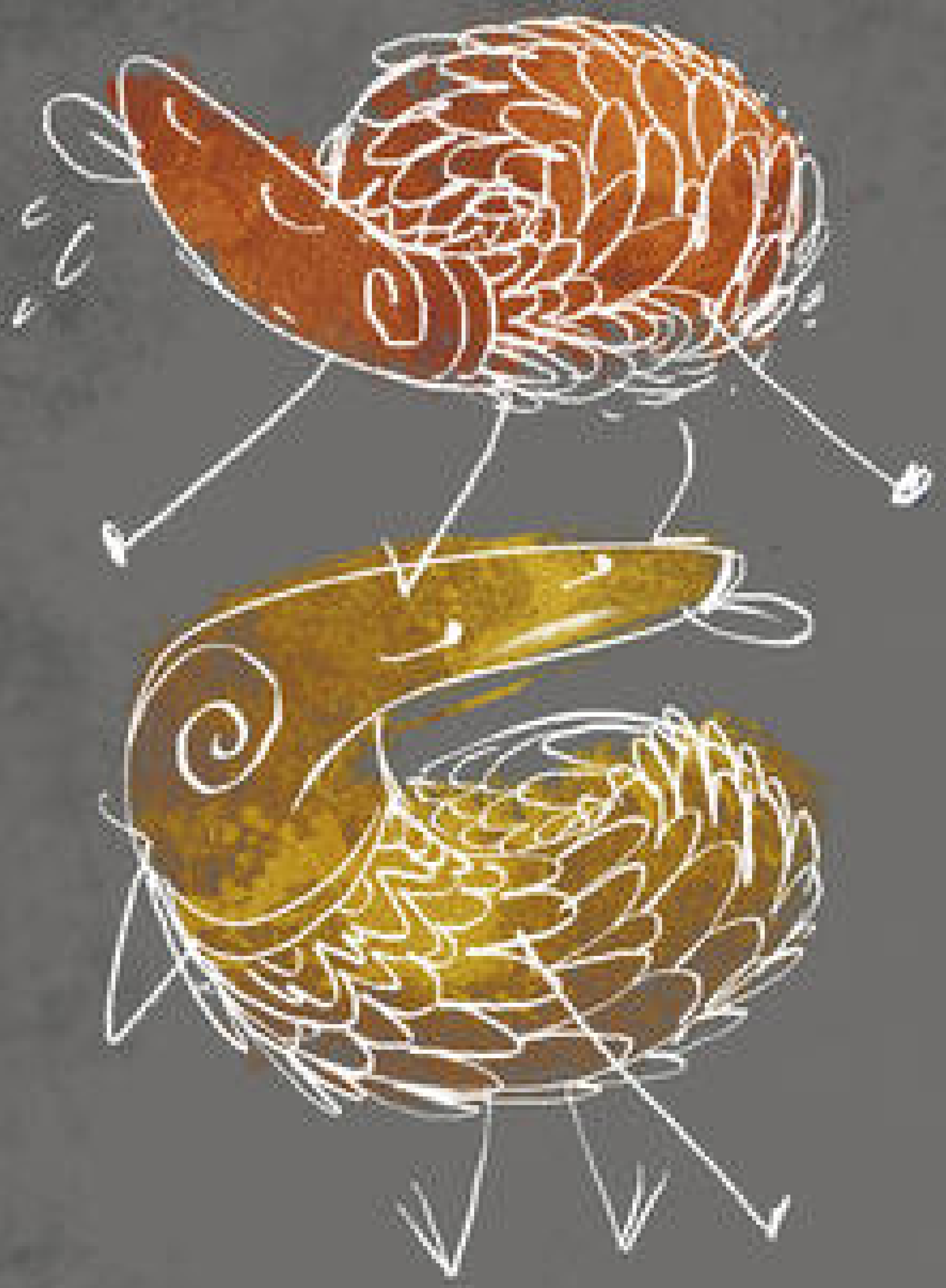
ARTIST *BECKY ROBERTS*

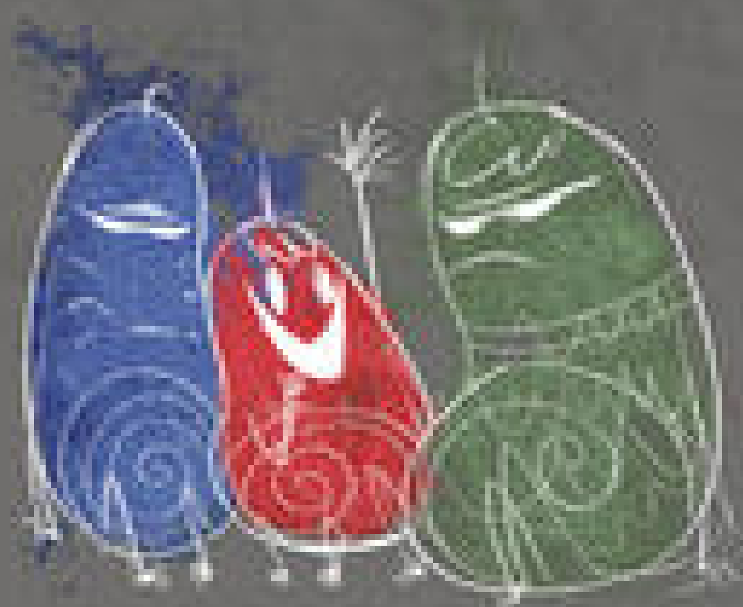
CONCEPT ART

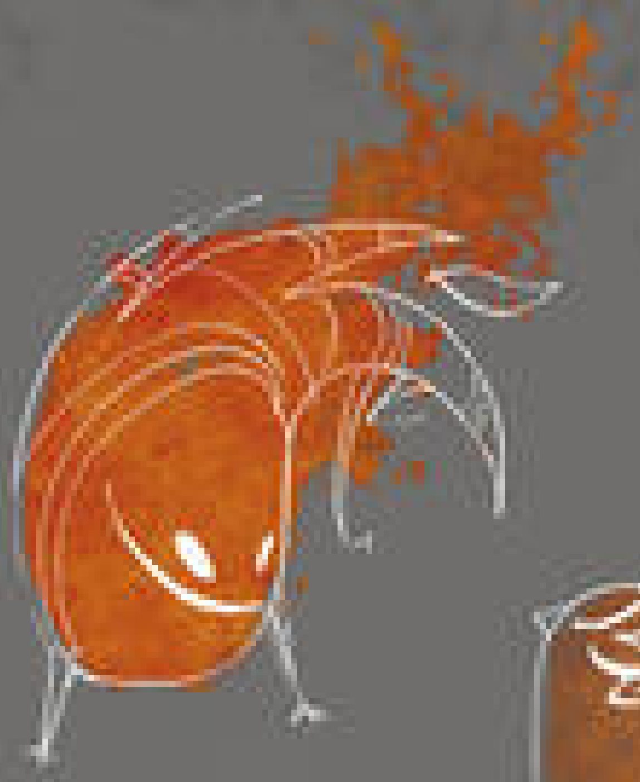
Ash was meant to be a very imaginative but lonely character, so it was important to find the right kind of imaginary friends for him. Who would these beings be who reached out to him from the wall?

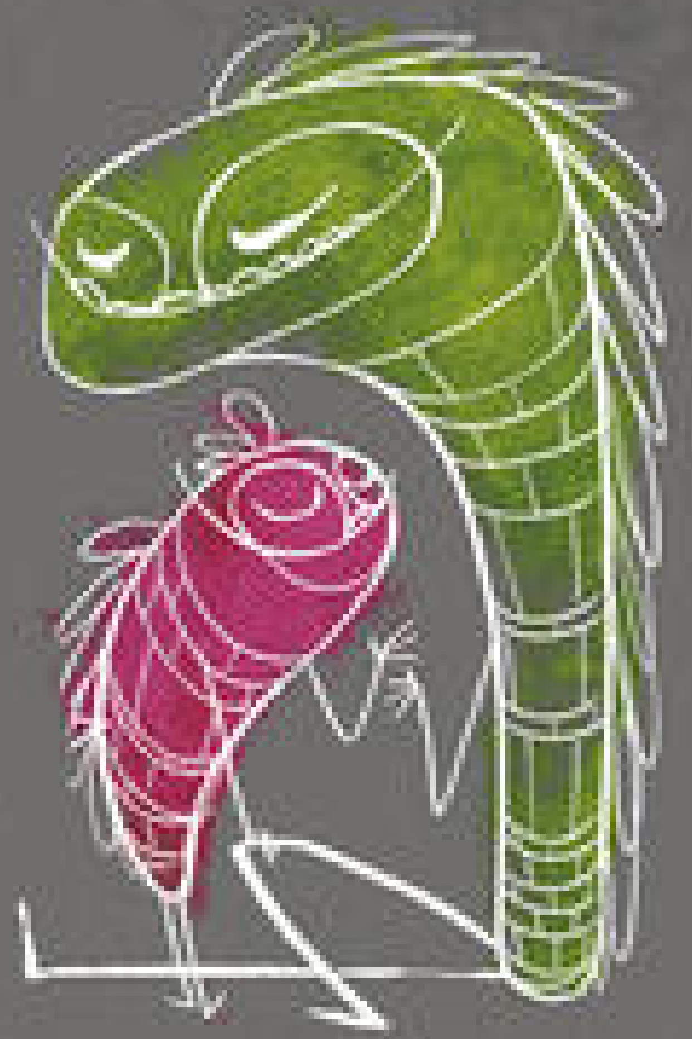


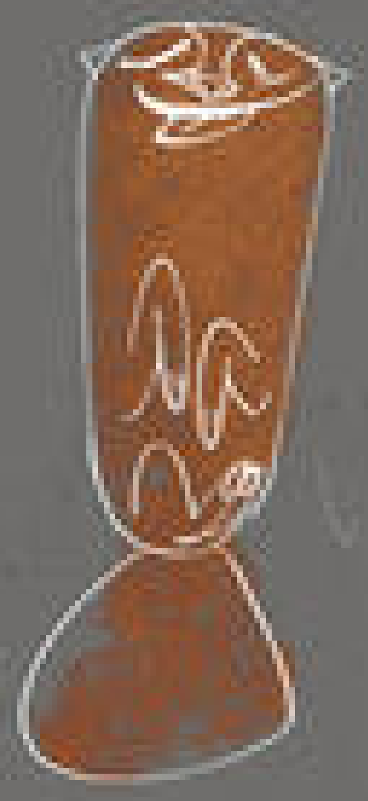
ARTIST JEFF SANGALLI

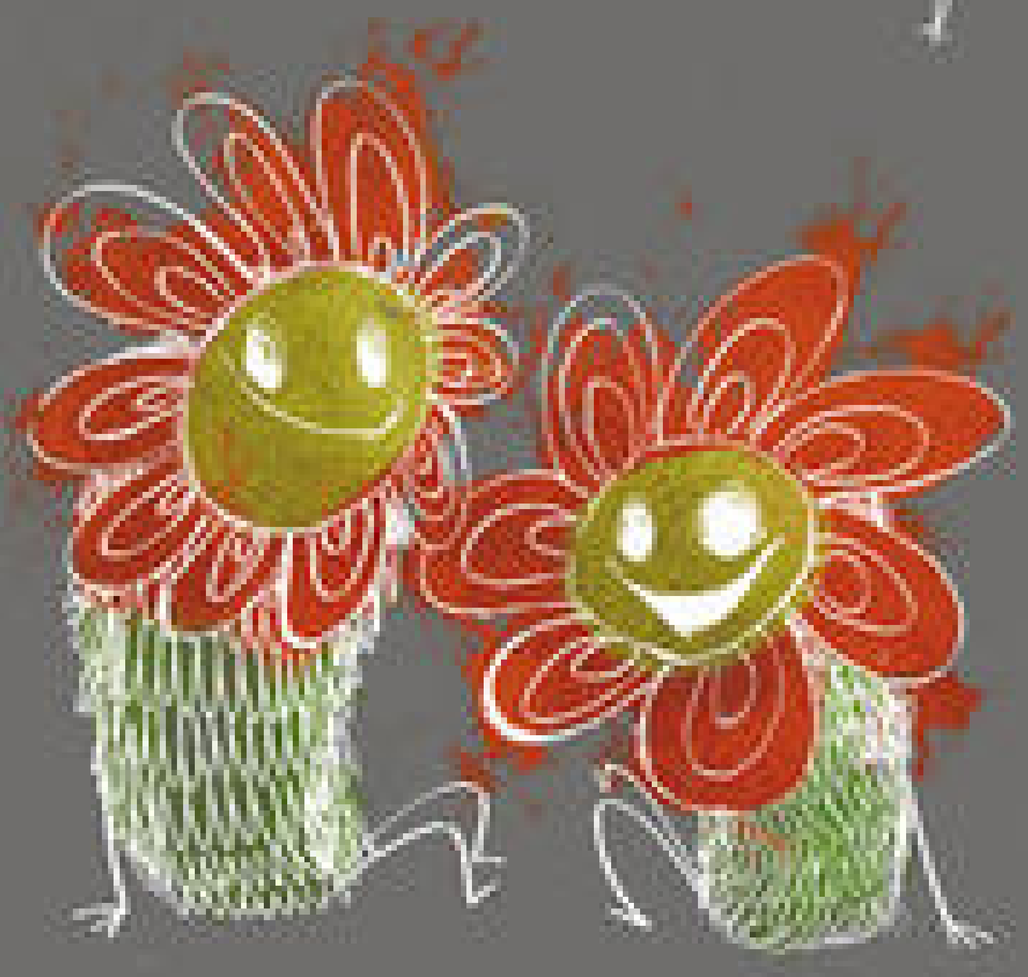










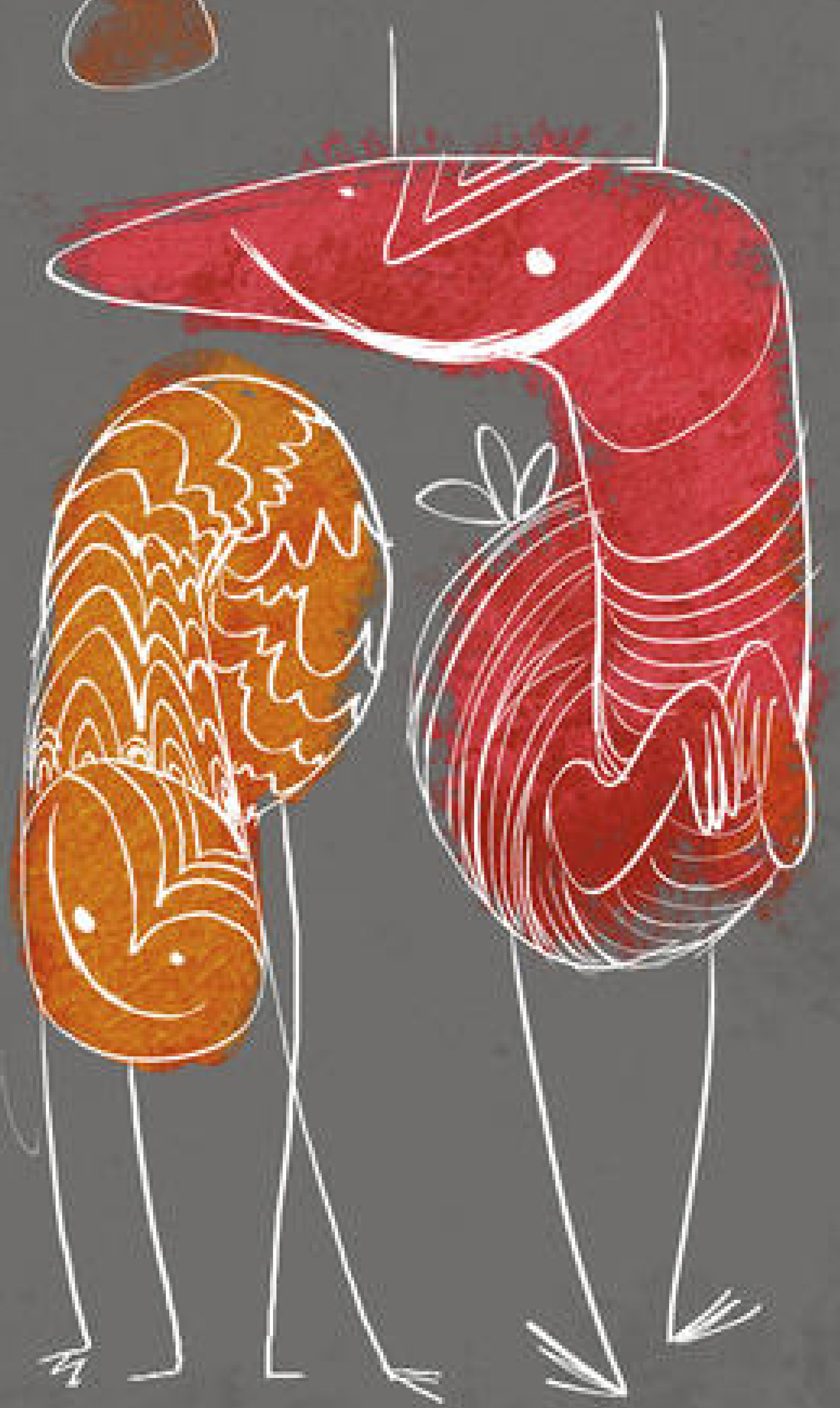


INSPIRATION

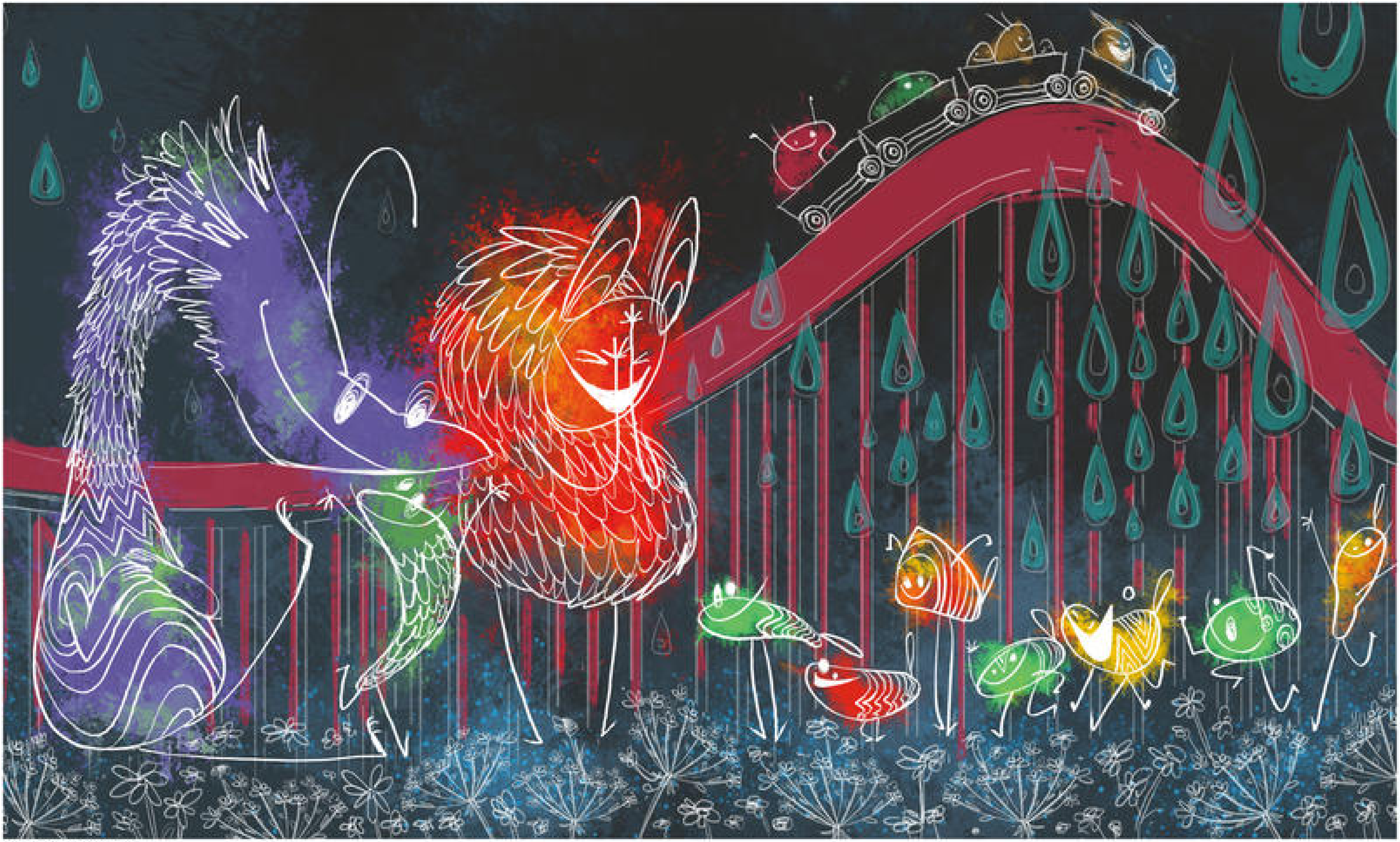
The Genies in their essence are fun, carefree, and whimsical. They are meant to resemble the little doodles you draw in the margins of your notebook, almost like they're keeping you company.

THE GENIES

When we were figuring out the design of the Genies, they started off as creatures that were more mysterious and vaguer. Later on, we thought of it as what Ash's brain looked like and how he processed emotions, so we tapped into our own memories as young artists growing up.



ARTIST LANCING LOVE CHEN

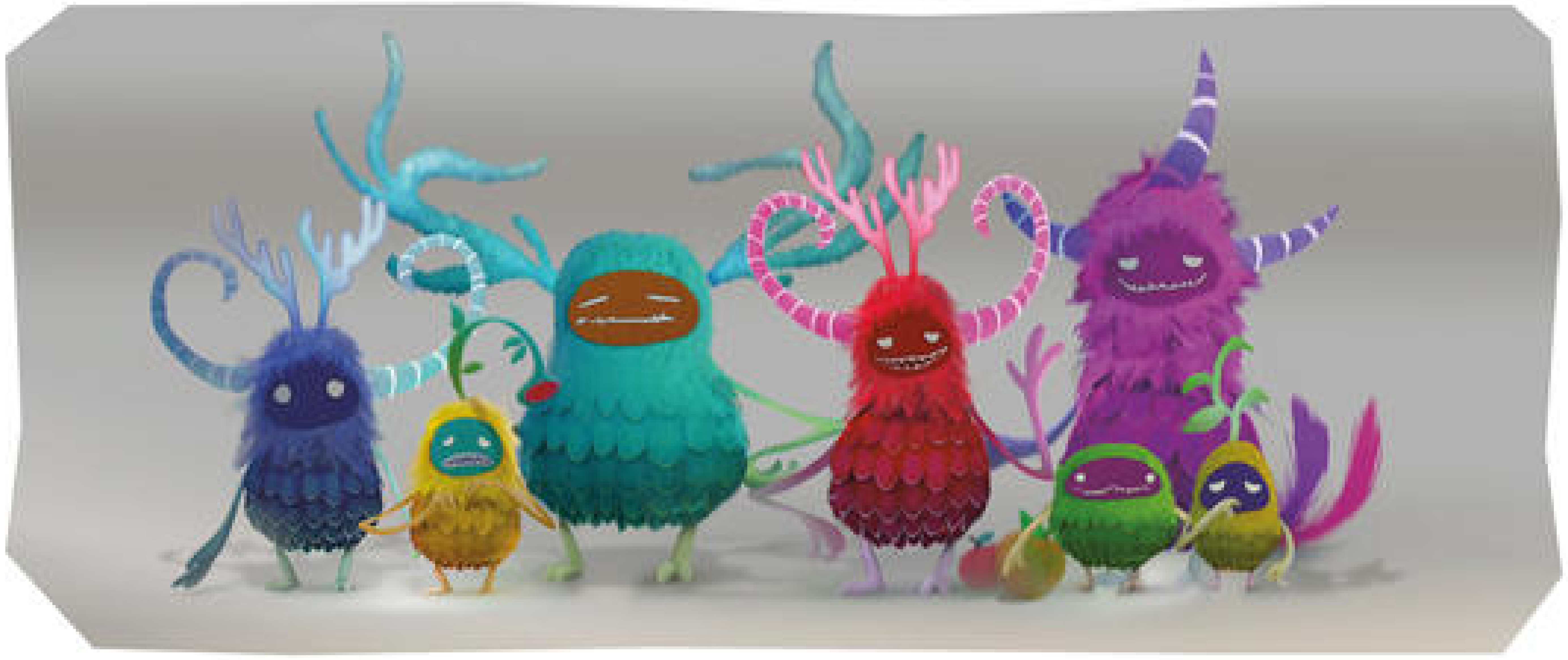


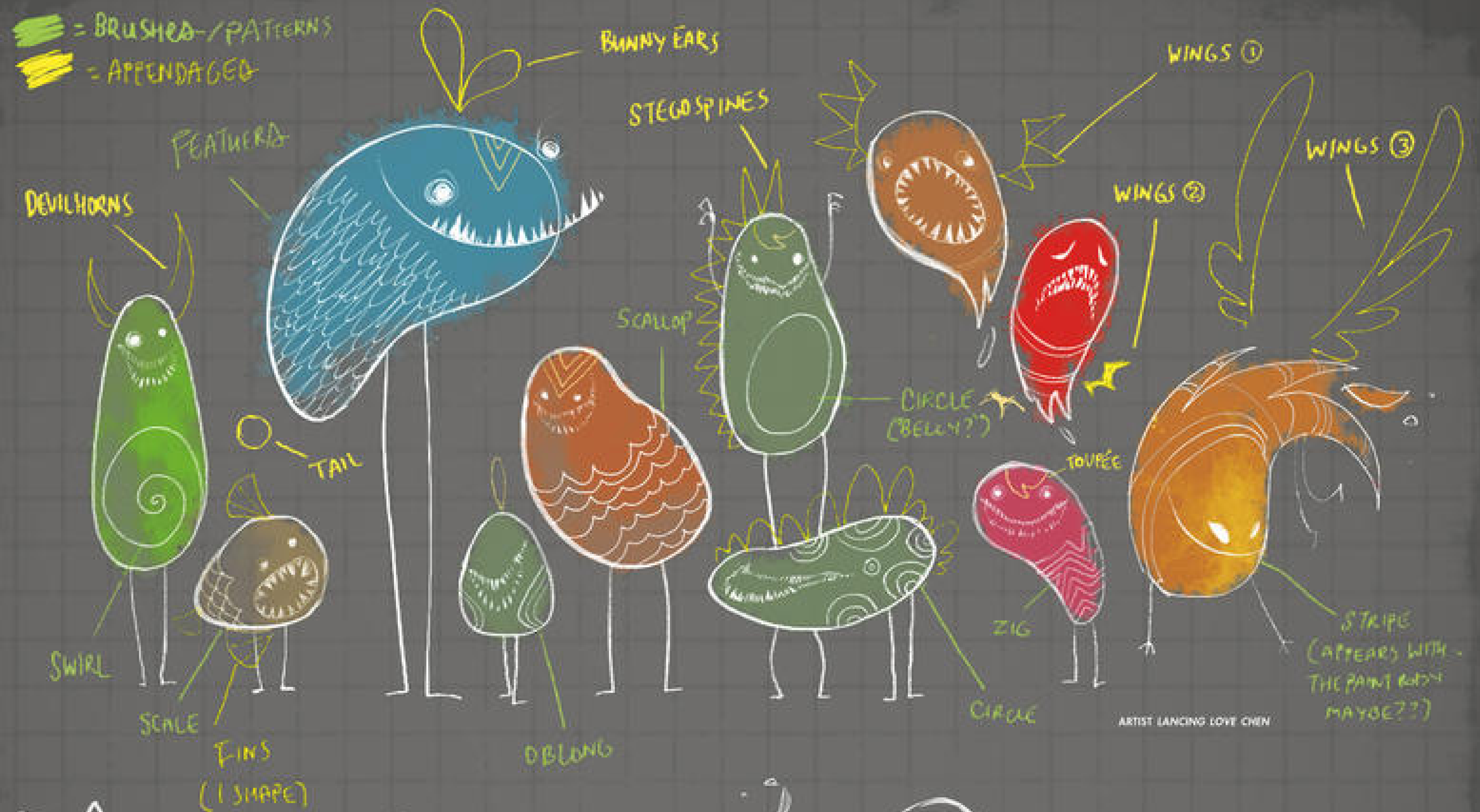
ARTIST *LANCING LOVE CHEN*

EARLY PROCESS

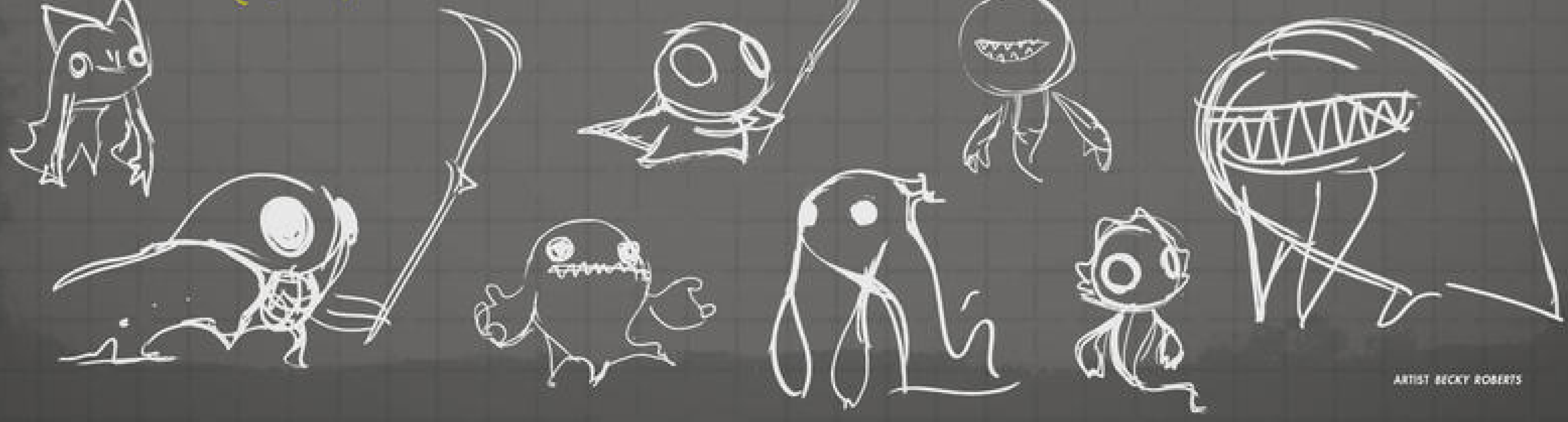
In the exploration stage we got zany, weird, and abstract. It was interesting trying to get to know what their behaviors were, like how do they act around each other? We wanted to make them exist in a world where their rules are completely their own (or technically, Ash's rules, since they all come from his mind).

ARTIST *JEFF SANGALLI (RIGHT)*



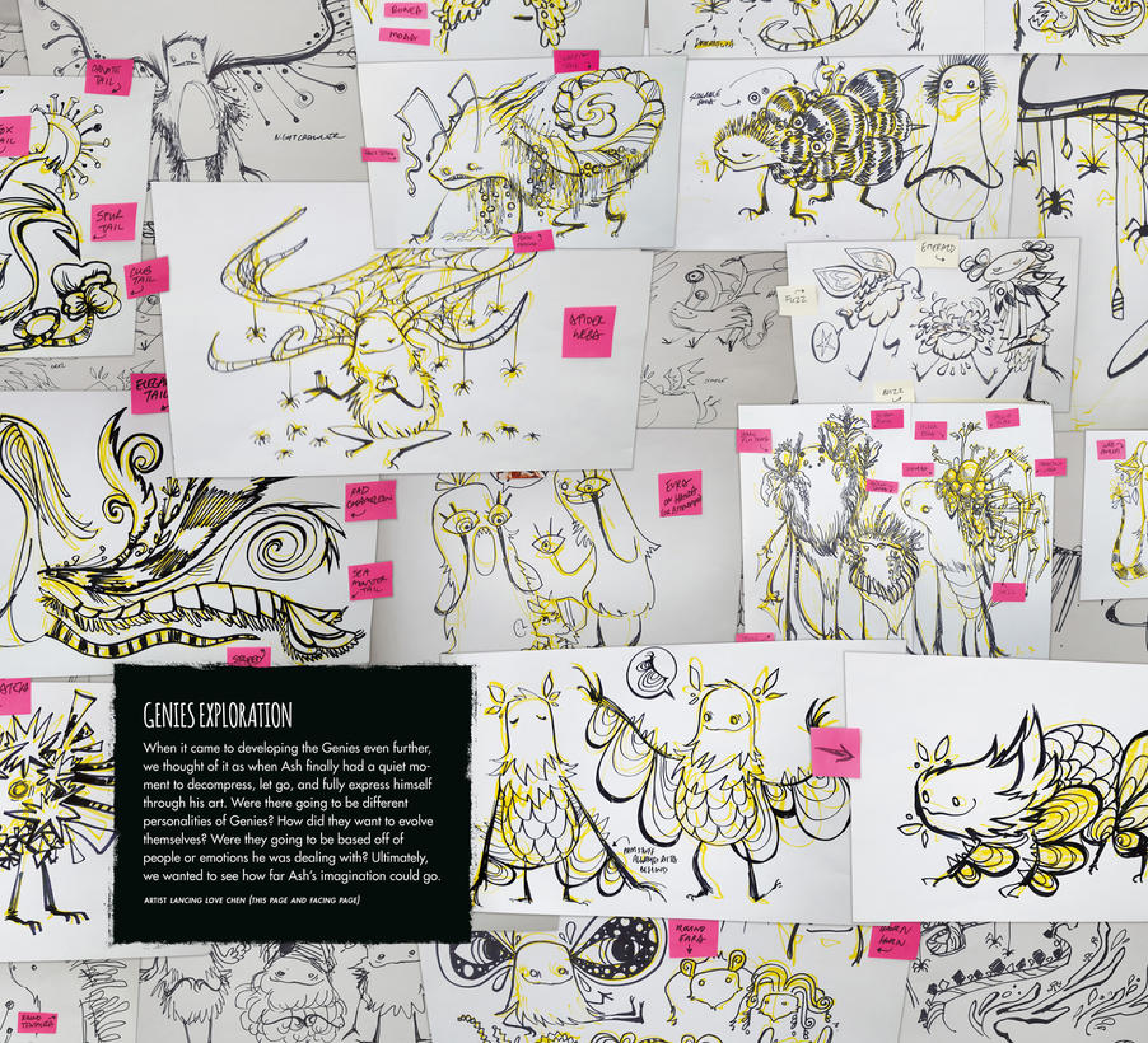

= BRUSHED / PATTERNS
= APPENDAGED
BUNNY EARS
FEATHERS
DEVILHORNS
STEGOSPINES
WINGS ①
WINGS ③
WINGS ②
SCALLOP
CIRCLE (BELLY?)
TAIL
TOUPÉE
SWIRL
SCALE
FINS (1 SHAPE)
OBLONG
ZIG
CIRCLE
STRIPE (APPEARS WITH THE PAINT BODY MAYBE??)

ARTIST LANCING LOVE CHEN



ARTIST BECKY ROBERTS

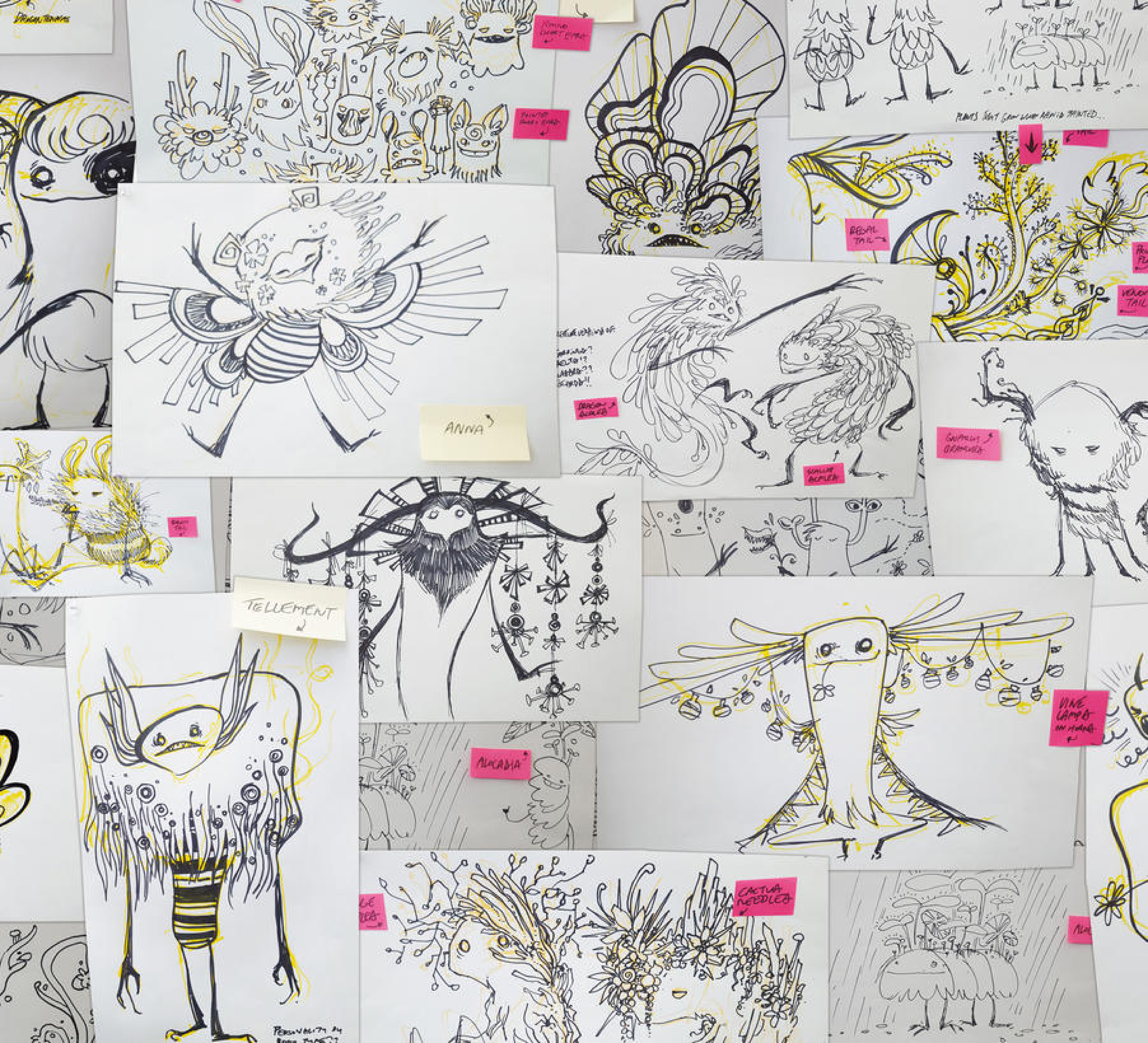
By starting with simpler shapes, we began to explore the different kinds of attachments Ash can put on the Genies, as well as figuring out how granular players can get with customizing them.


BONED
MODAL
NIGHTCRAWLER
SPUR TAIL
CLUB TAIL
SPIDER WEBS
EMERALD
FUZZ
FAD CHAMELEON
SEA MONSTER TAIL
ROUND EARS
ROUND TENTACLES

GENIES EXPLORATION

When it came to developing the Genies even further, we thought of it as when Ash finally had a quiet moment to decompress, let go, and fully express himself through his art. Were there going to be different personalities of Genies? How did they want to evolve themselves? Were they going to be based off of people or emotions he was dealing with? Ultimately, we wanted to see how far Ash's imagination could go.

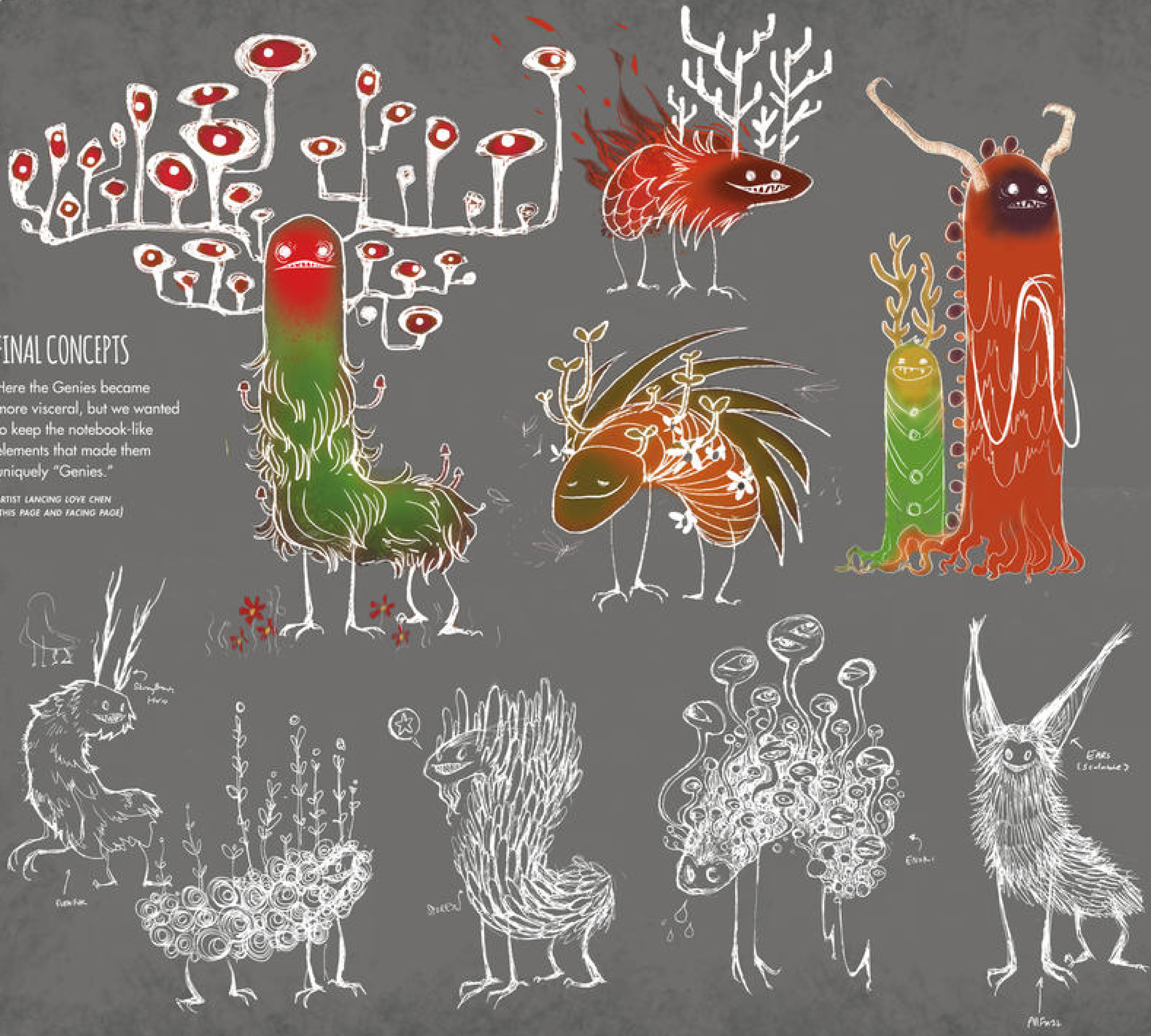
ARTIST LANCING LOVE CHEN (THIS PAGE AND FACING PAGE)


ANNA
TELLEMENT
ALKADIA
CACTUS NEEDLES
VINE LAMPS IN ARMS
REGAL TAIL
TAIL

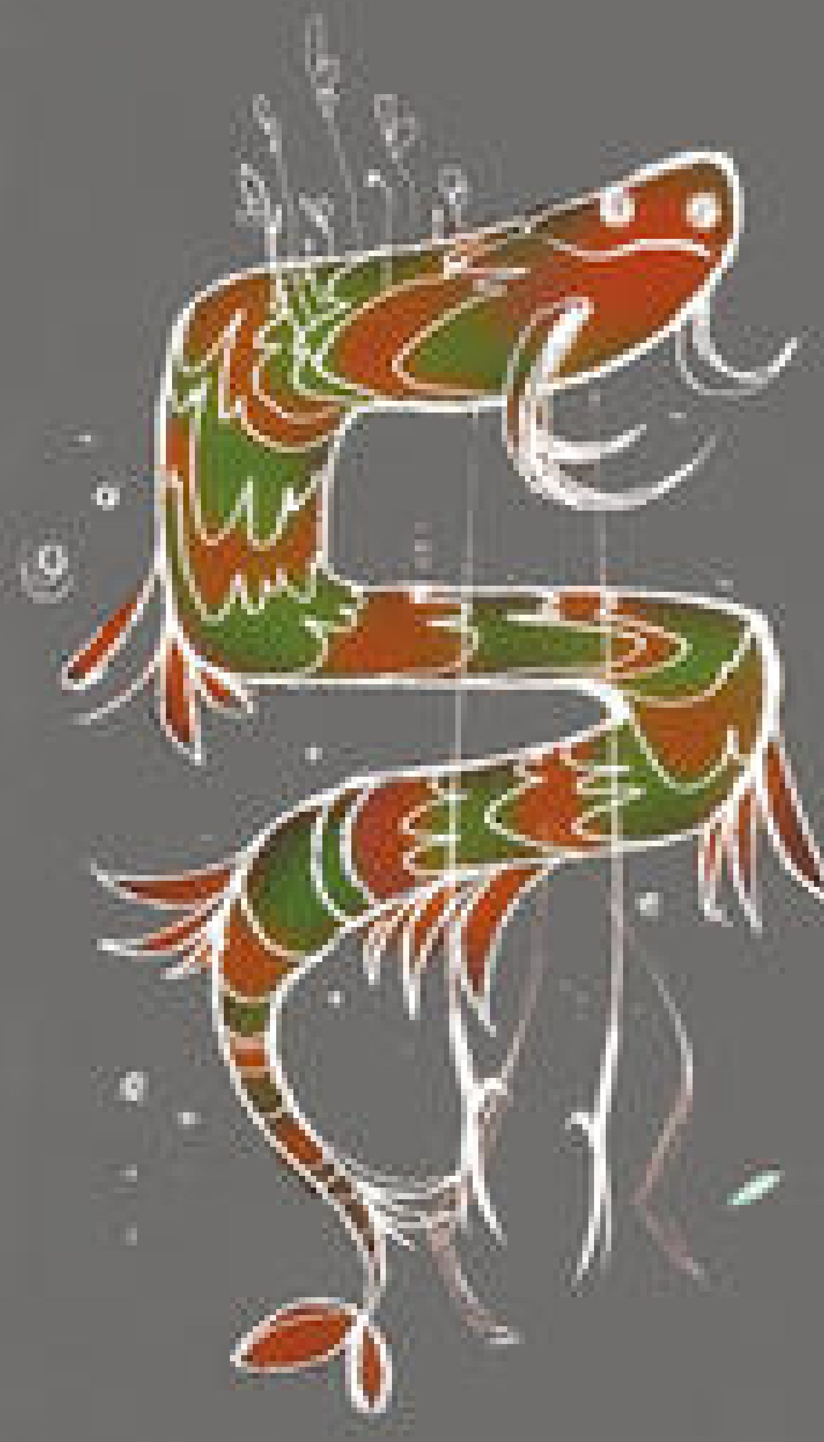
FINAL CONCEPTS

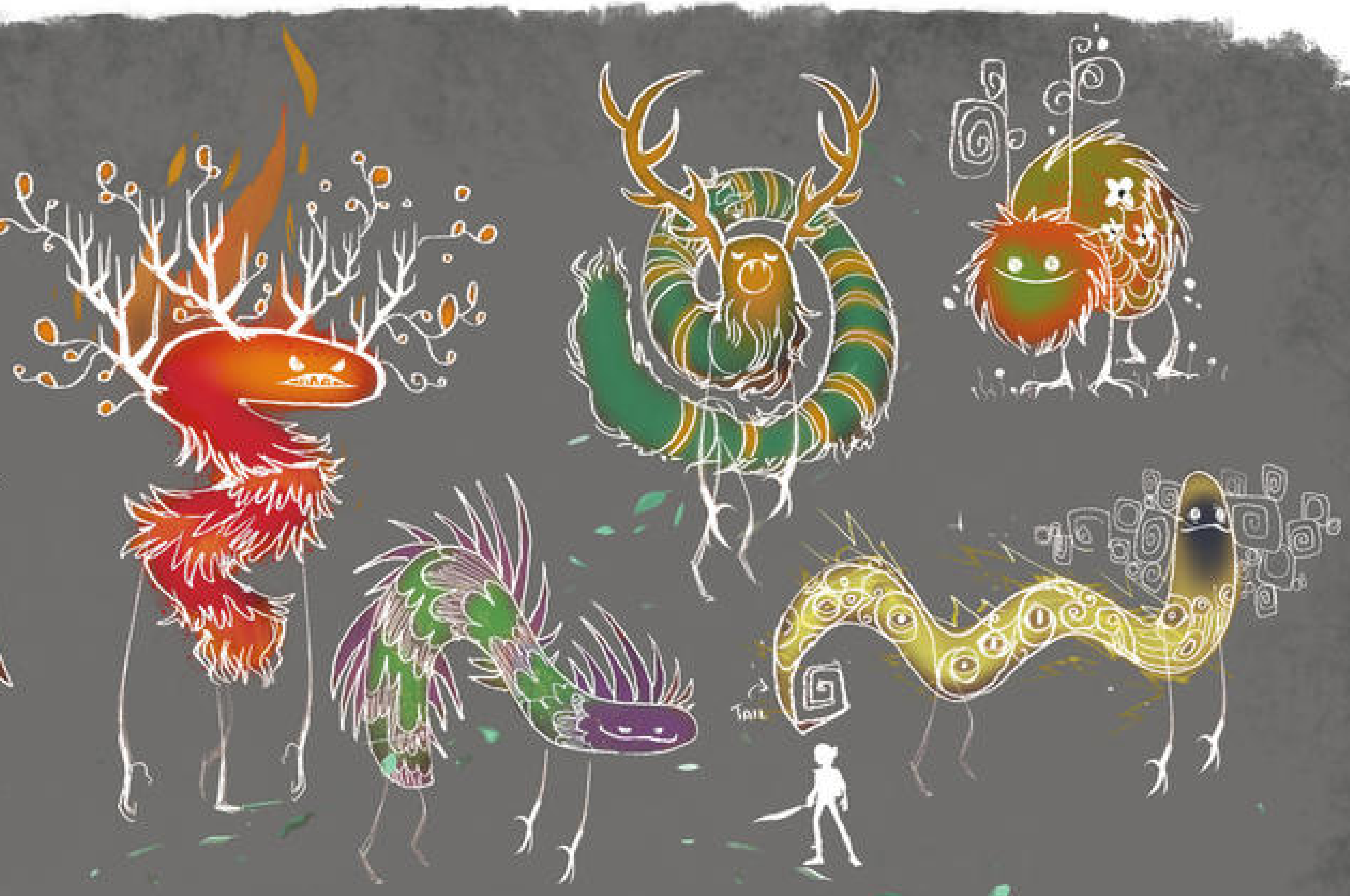
Here the Genies became more visceral, but we wanted to keep the notebook-like elements that made them uniquely "Genies."

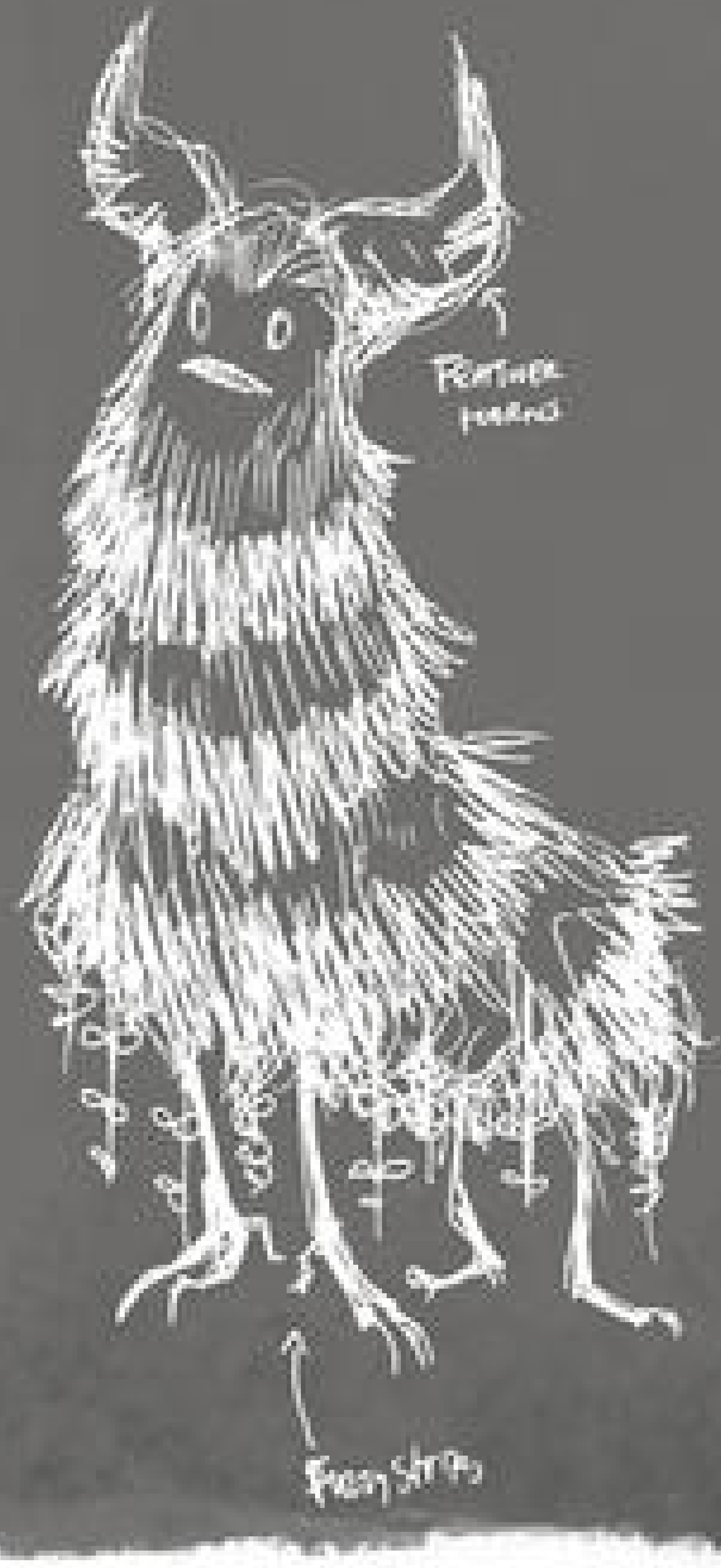
ARTIST LANCING LOVE CHEN
(THIS PAGE AND FACING PAGE)



Exploring the variety of body types Ash can make with his brush.

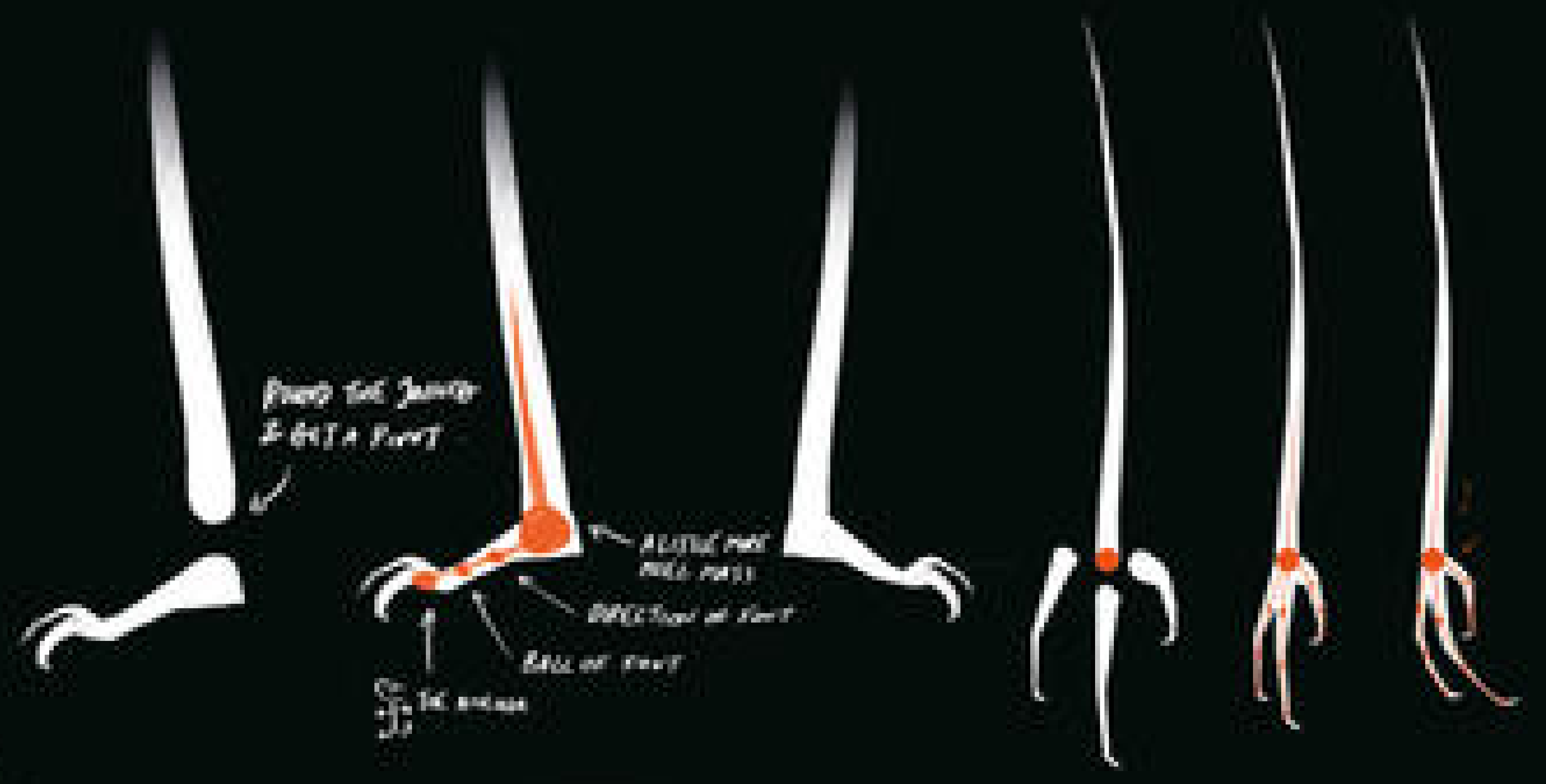


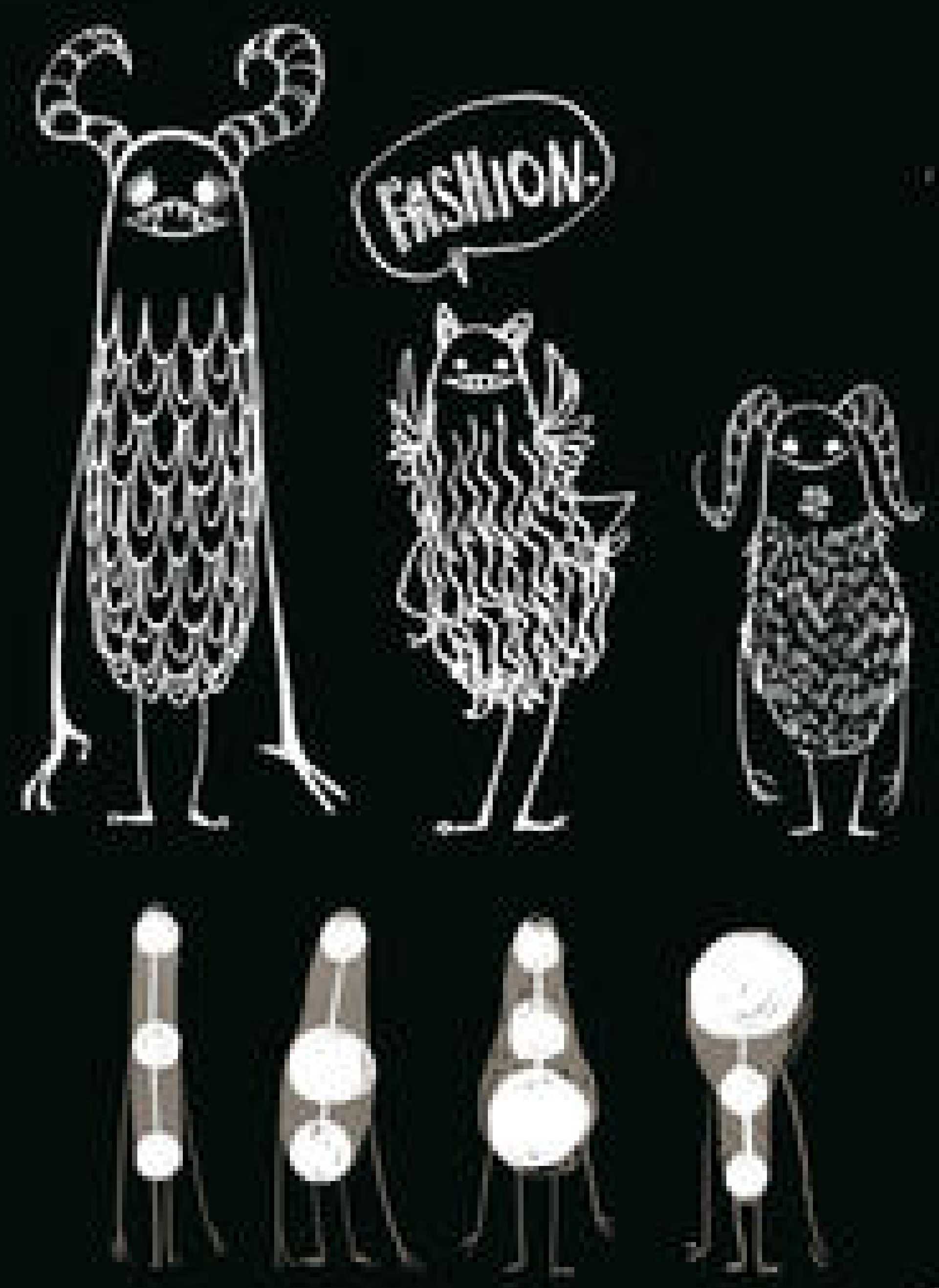



Feather horns
Fuzzy strips

MOVEMENT

The Genies were built much like puppets in a stop-motion film. Figuring out how their bodies were made was a challenge.

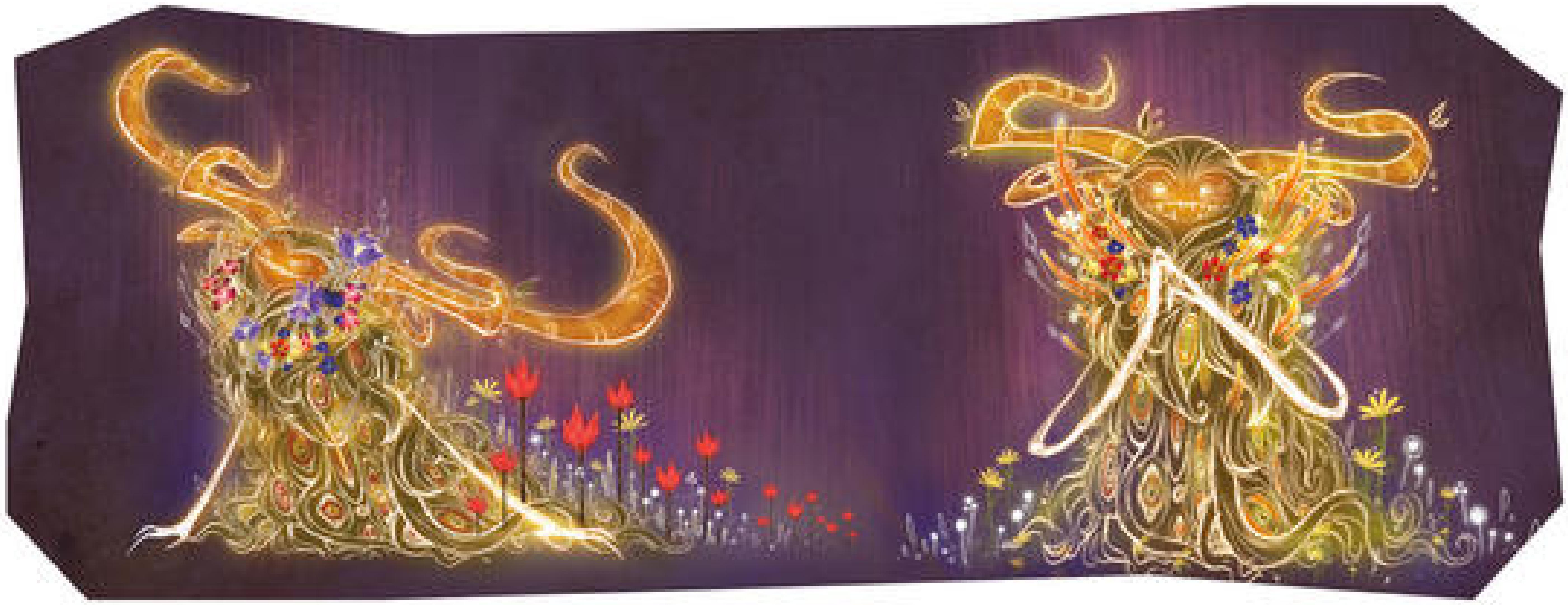

ROUND THE JOINTS & GET A POINT
ALLOWS MORE HEEL MASS
DIRECTION OF FOOT
BALL OF FOOT
TOE BREAKS

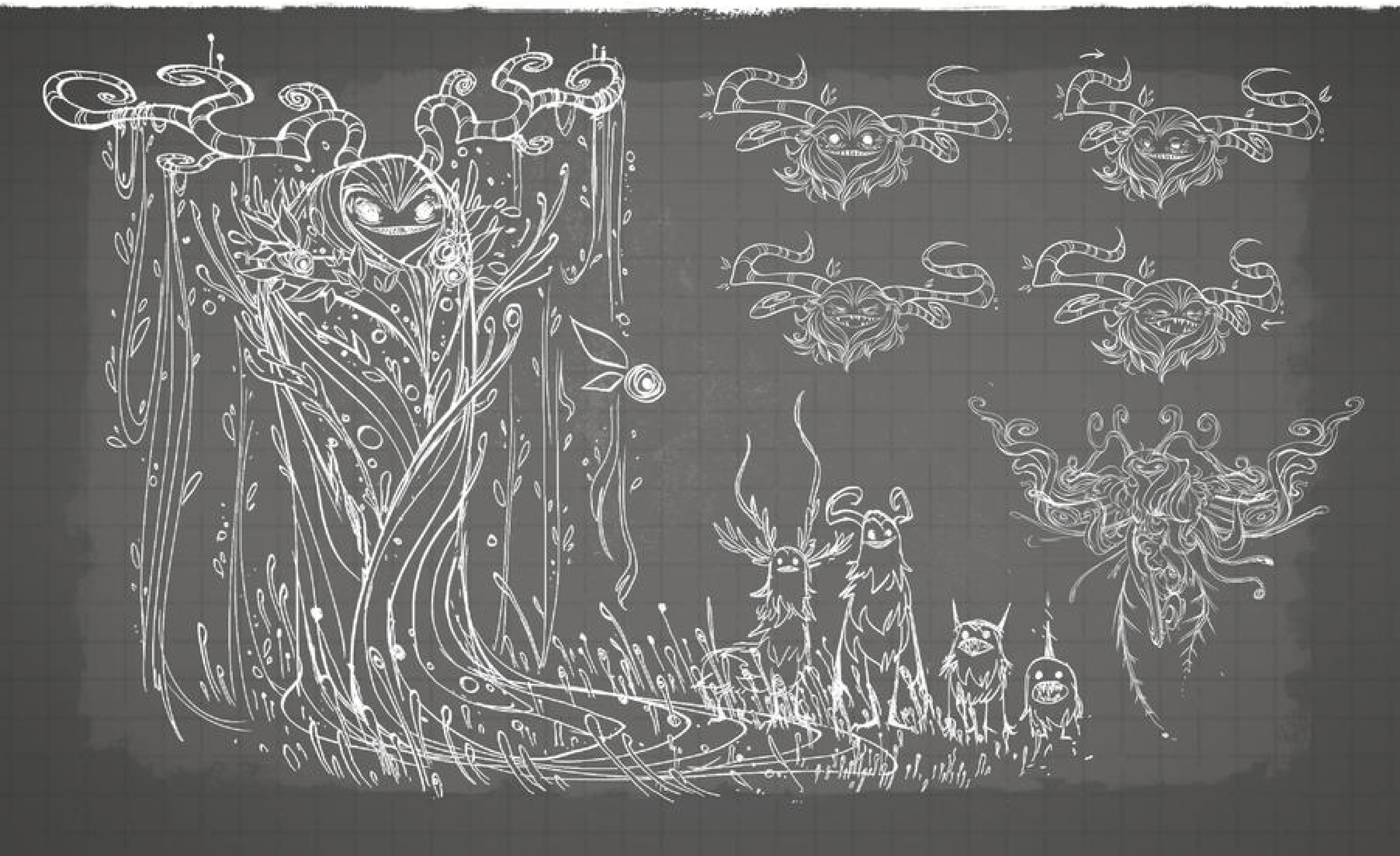


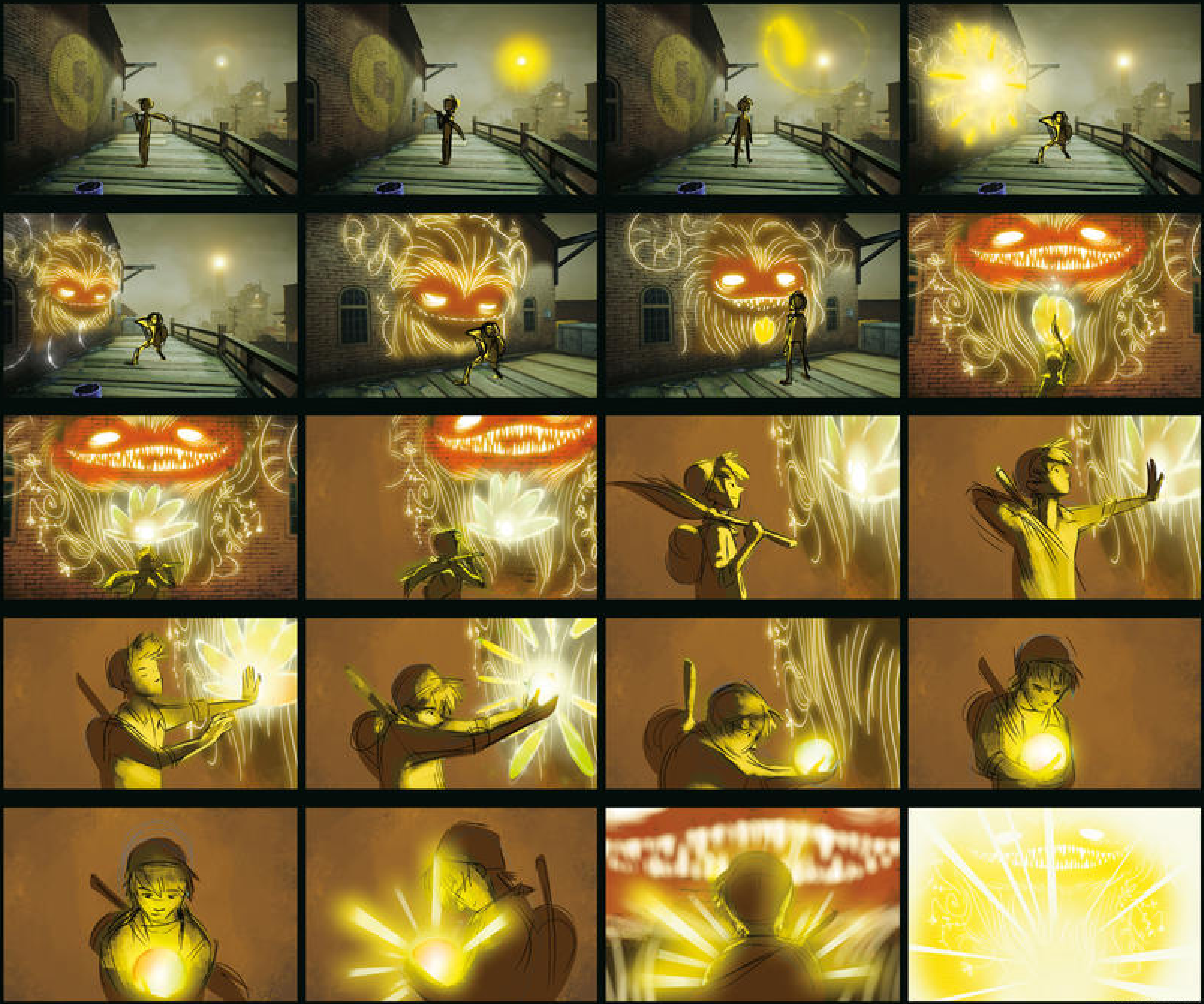
LUNA CONCEPT

Luna's initial concept was that she was a Mother Nature type of figure. Essentially the Mother of all Genies, which Ash viewed as their caretaker. She had a much more ornate approach to differentiate her from the rest.

ARTIST LANCING LOVE CHEN (THIS PAGE)

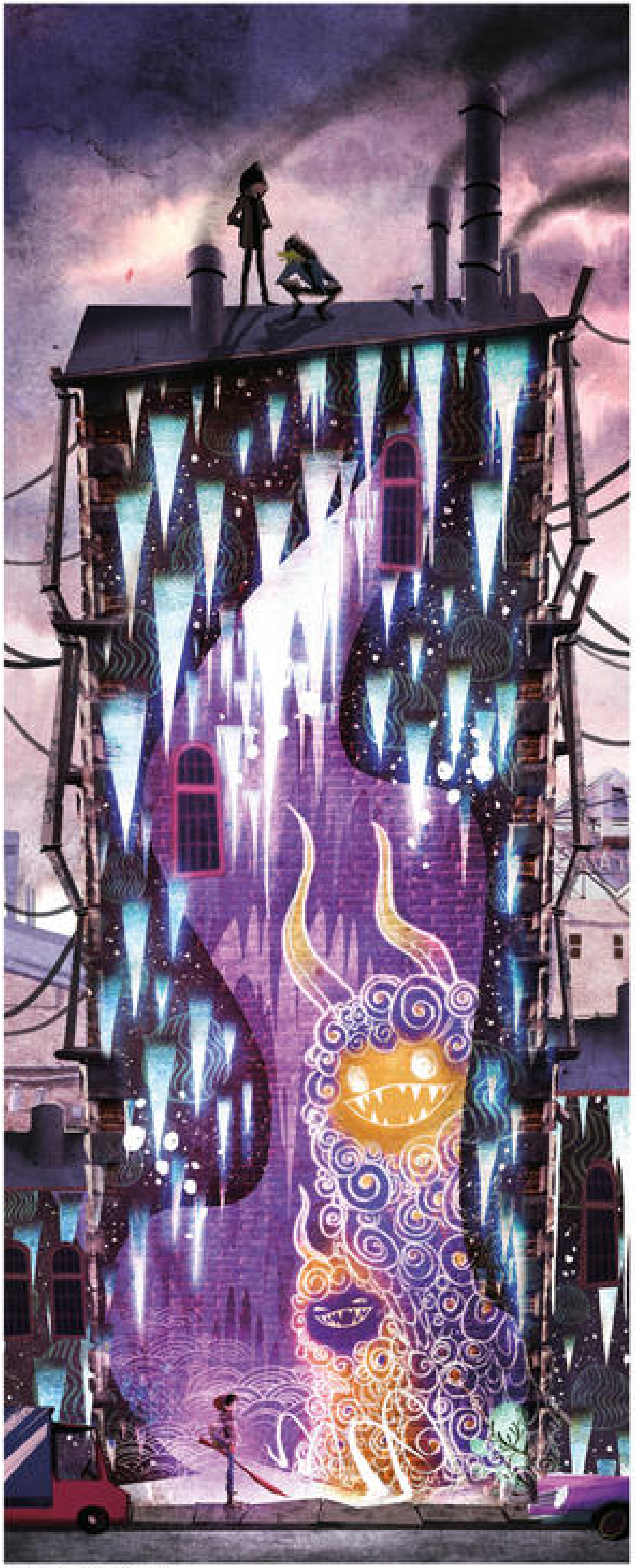




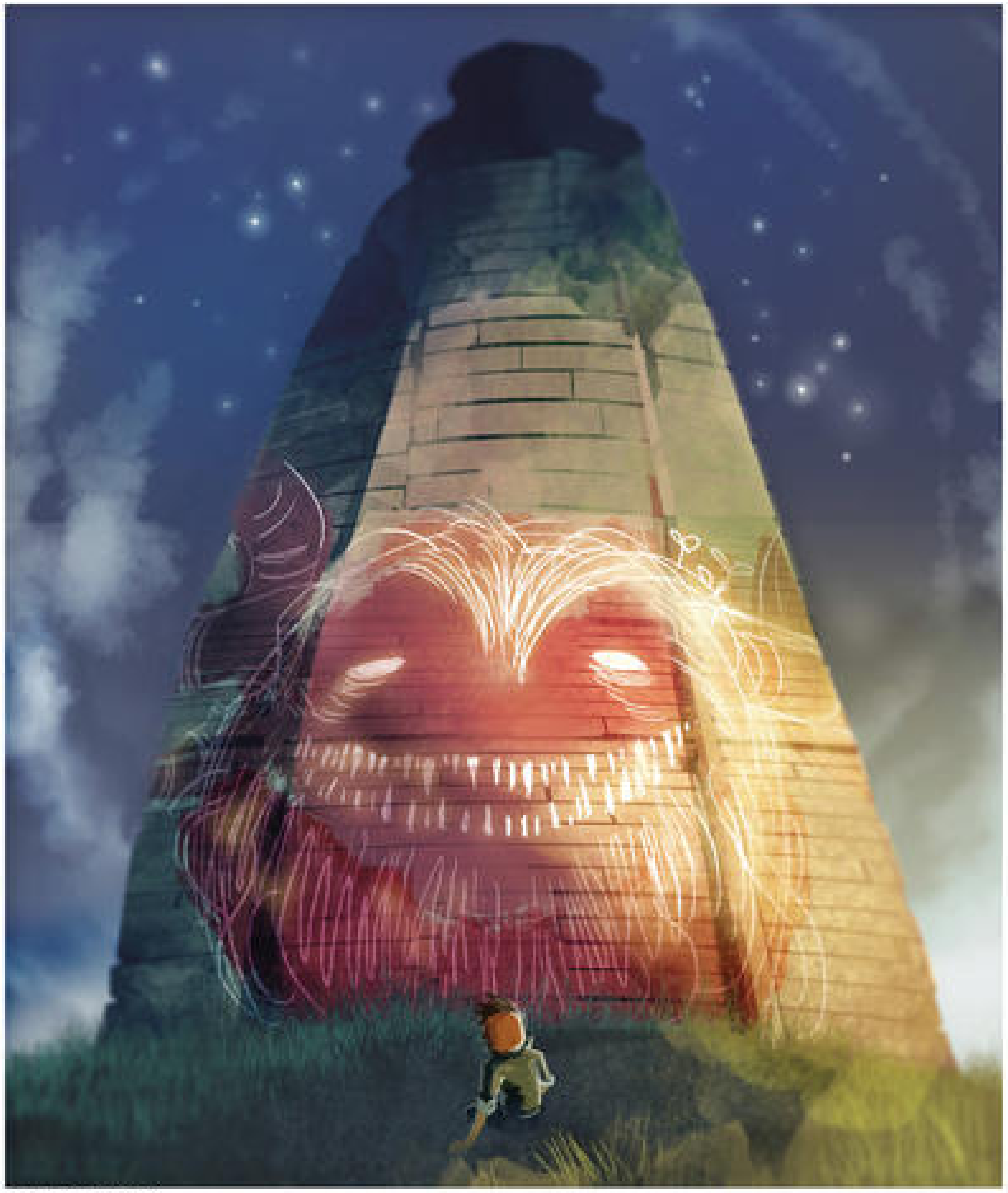


ARTIST *LUCIE ROBERTS*

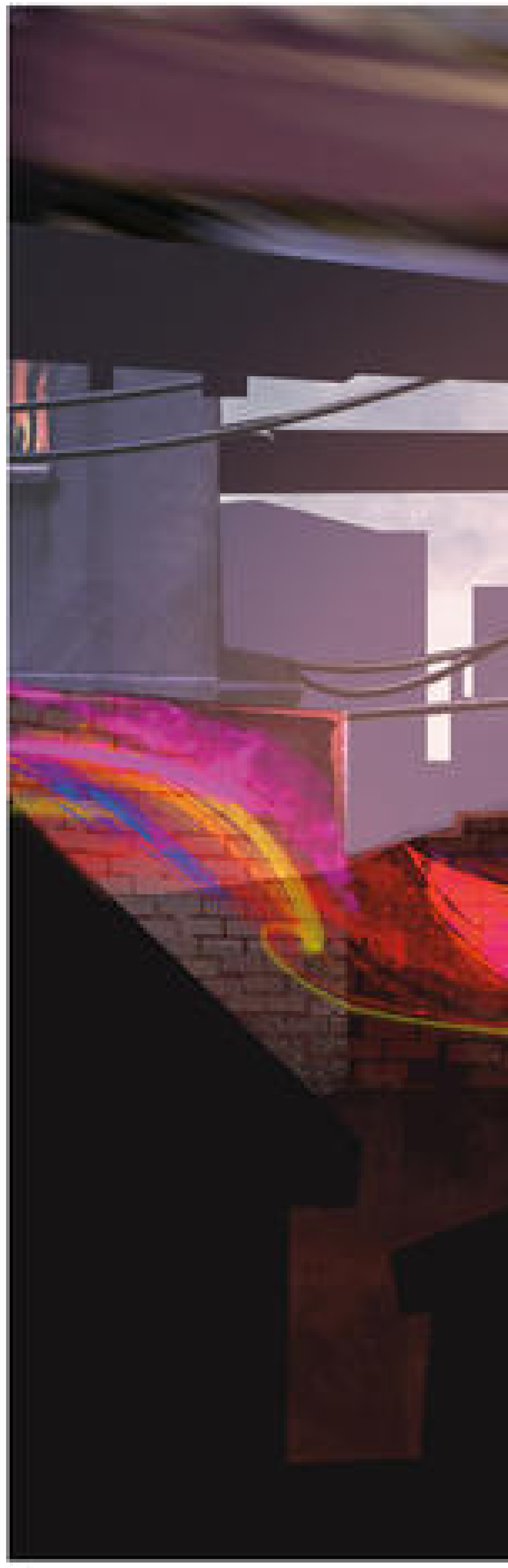
For storyboards, we first take in-game screenshots, draw character performances, implement any VFX, and then time out a video for previsualization. This helps us imagine new story and gameplay elements before production.

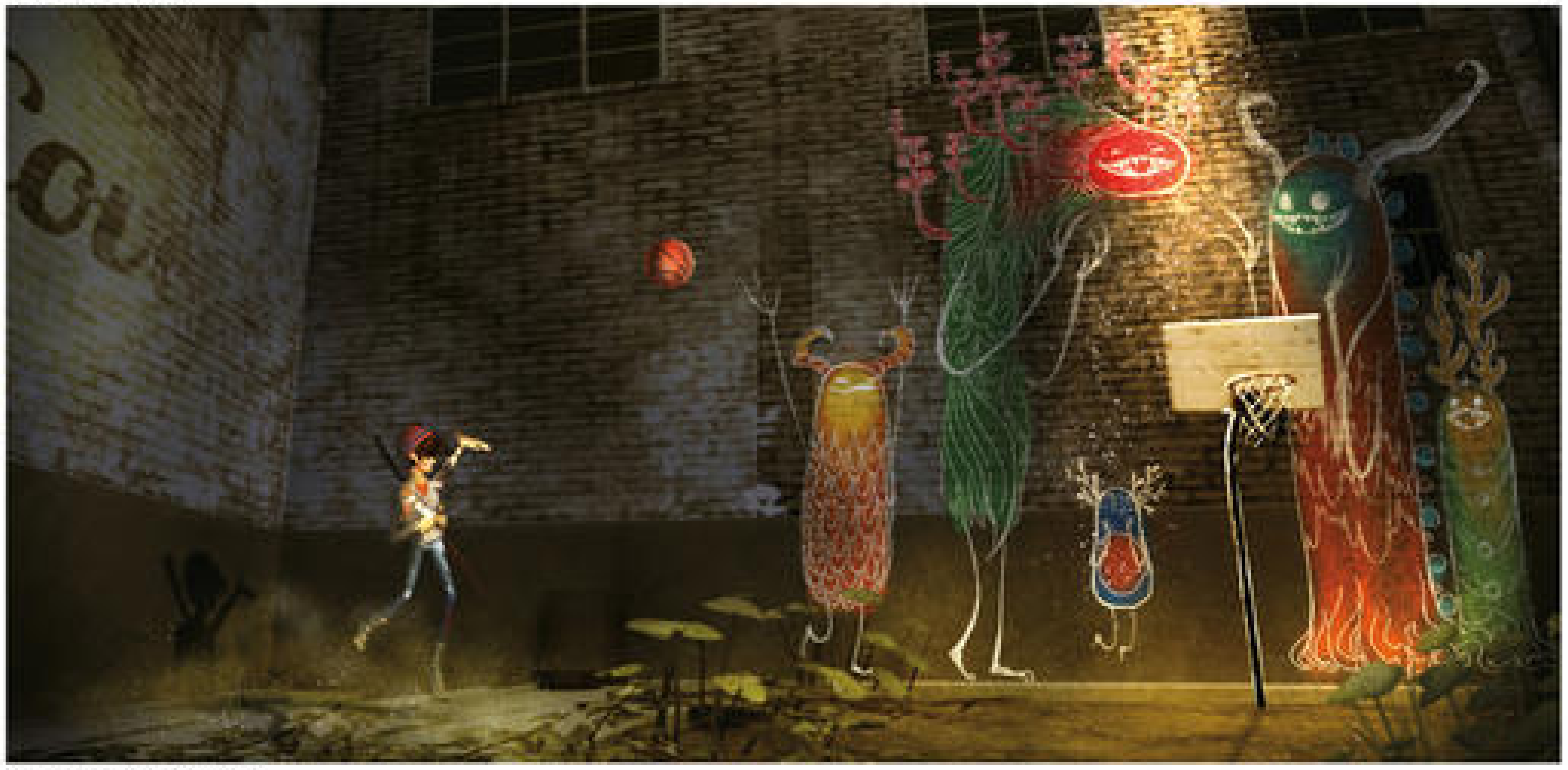


ARTIST *LANCING LOVE CHEN*

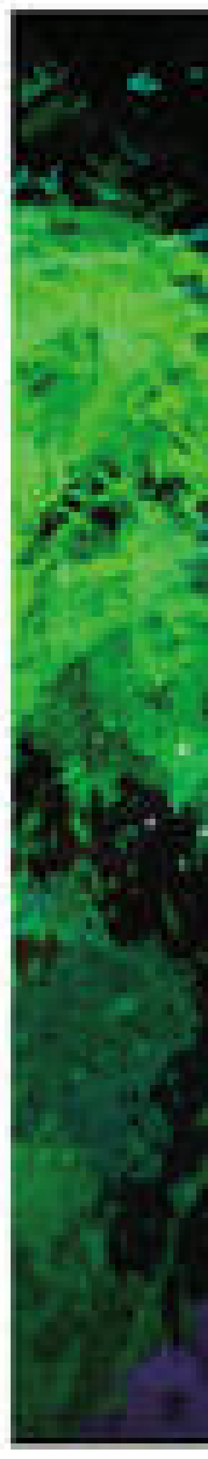


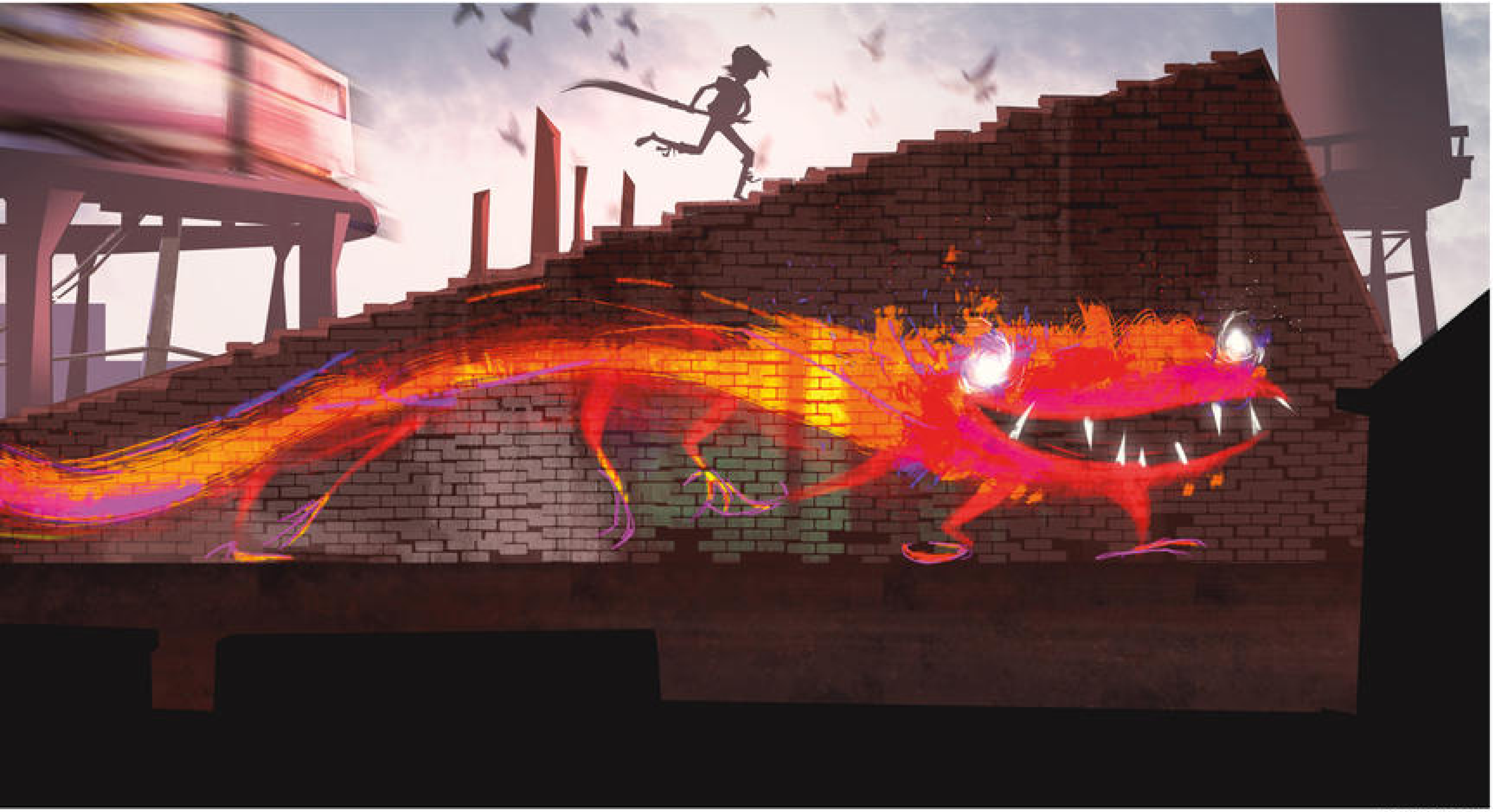
ARTIST *LUCIE ROBERTS*



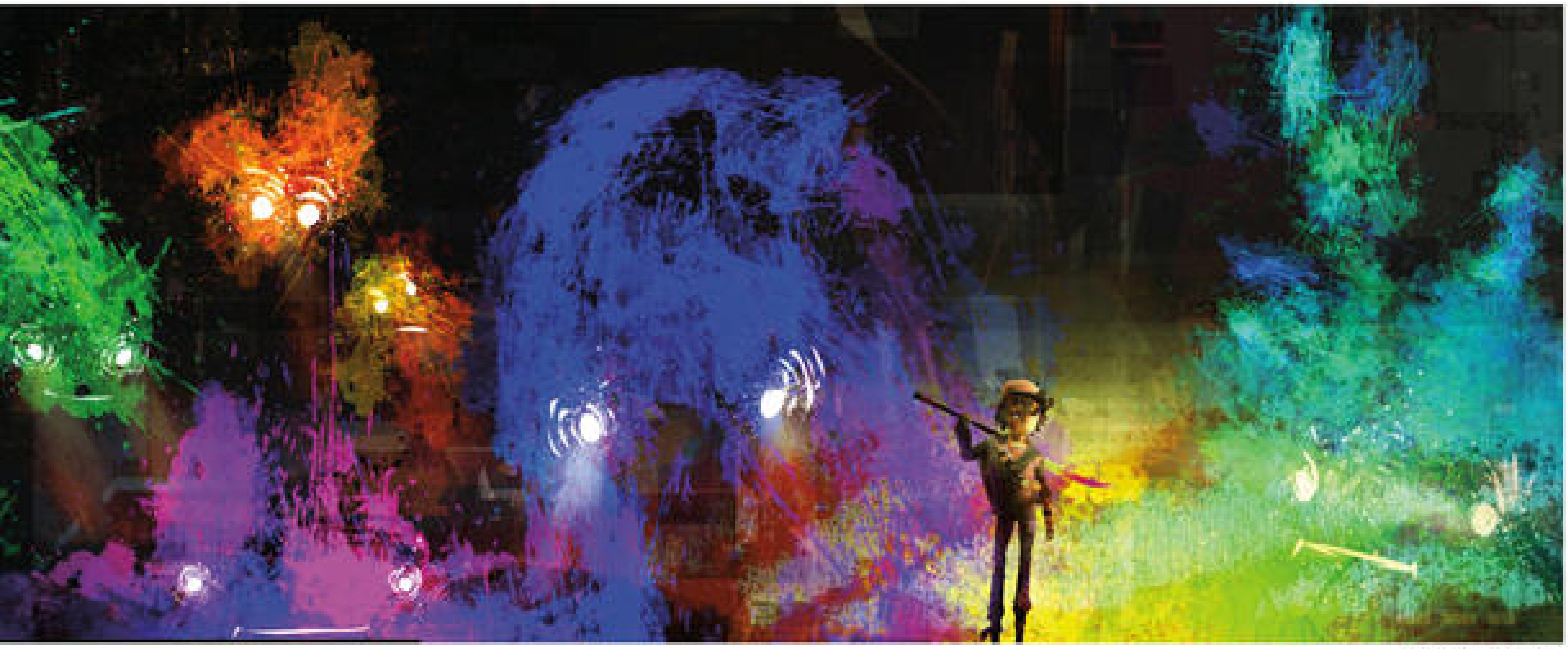


ARTIST *LANCING LOVE CHEN*





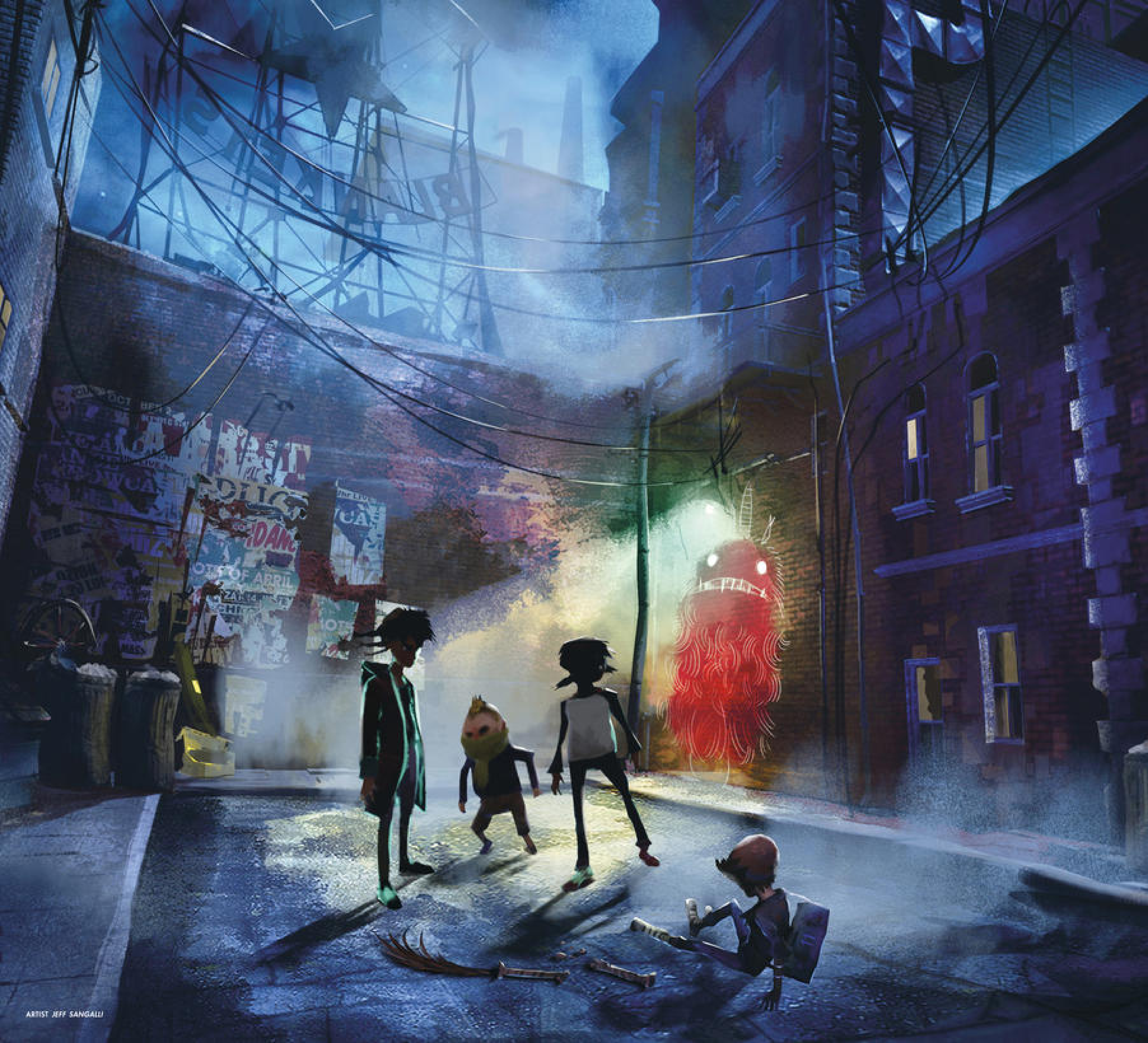
ARTIST BECKY ROBERTS



ARTIST JEFF SANGALLI

CONCEPT ART

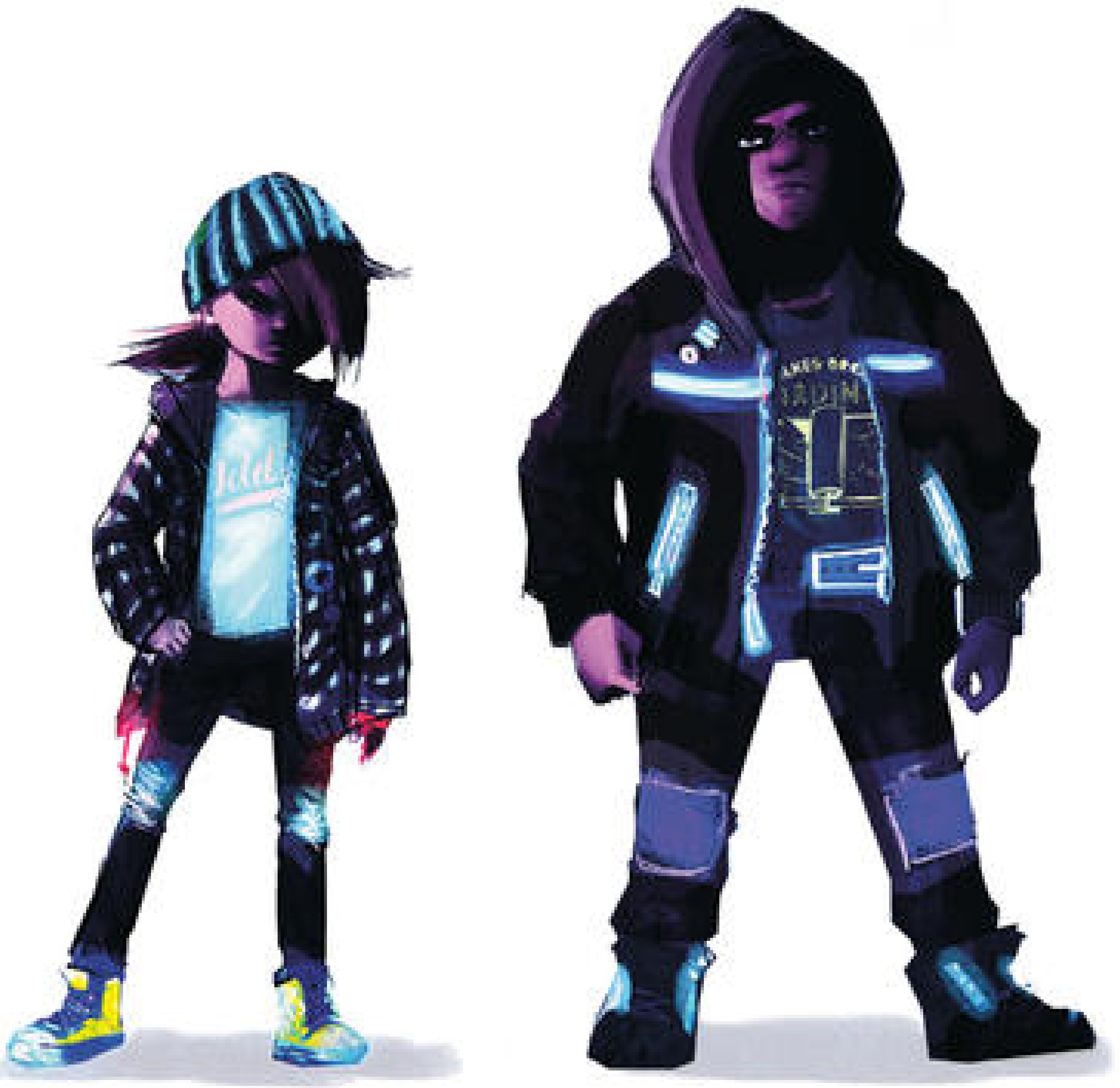
A big part of how the Genies interact with Ash is intertwined with how they relate to Denska. The city is a character in itself and could make the Genies and their habitats larger than life. We had to show Denska's walls, rooftops, and dark corners in our concept work to get the full picture of what Ash's life would be like with the Genies.

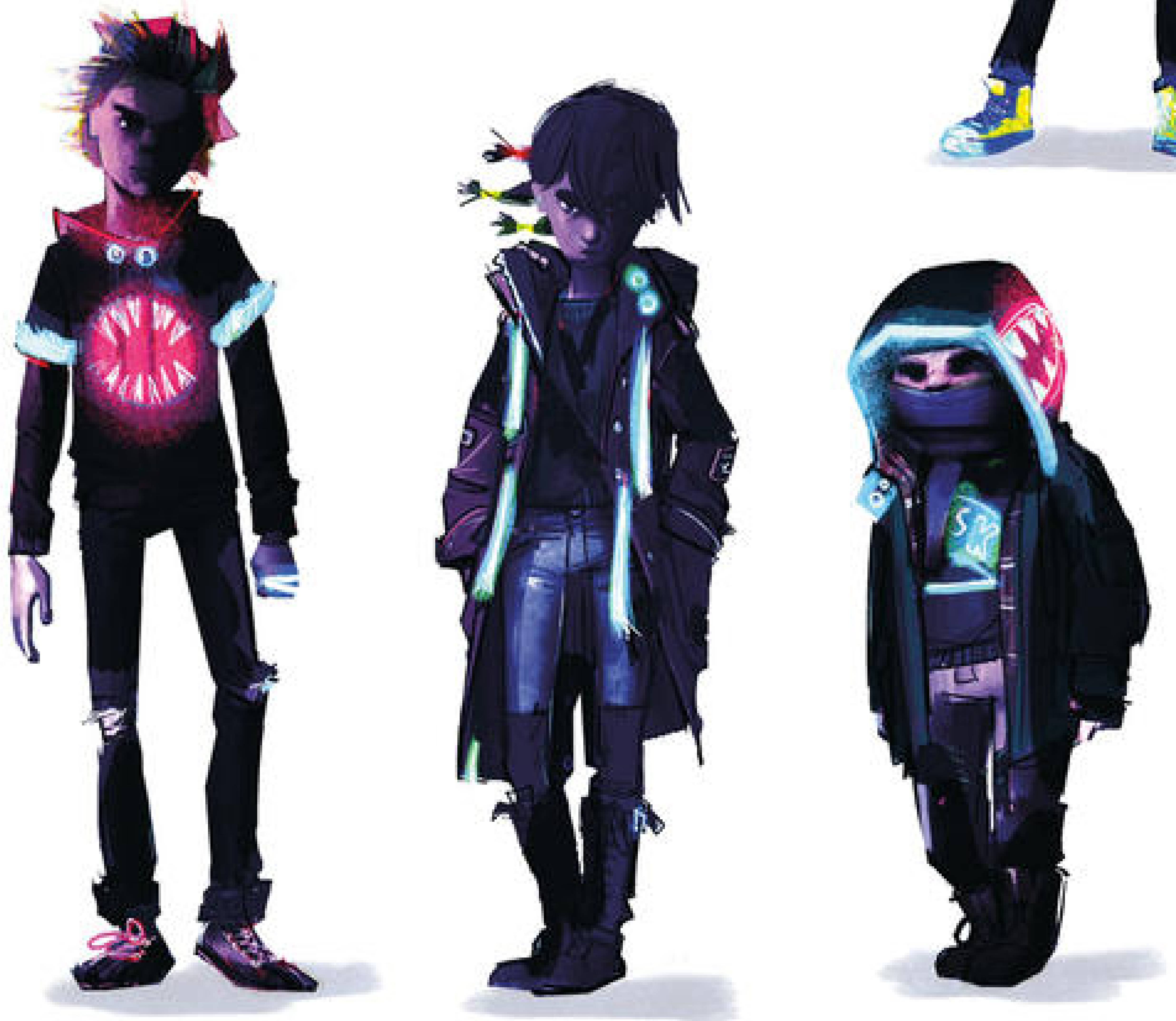


ARTIST JEFF SANGALLI

THE BULLIES

The bullies are a group of kids who, like Ash, find themselves drawn to the rundown alleys of Denska. When the Darkness begins to swallow their town, however, the bullies embrace the chaos. As the sun sets, they roam the streets trashing the old empty homes and storefronts.

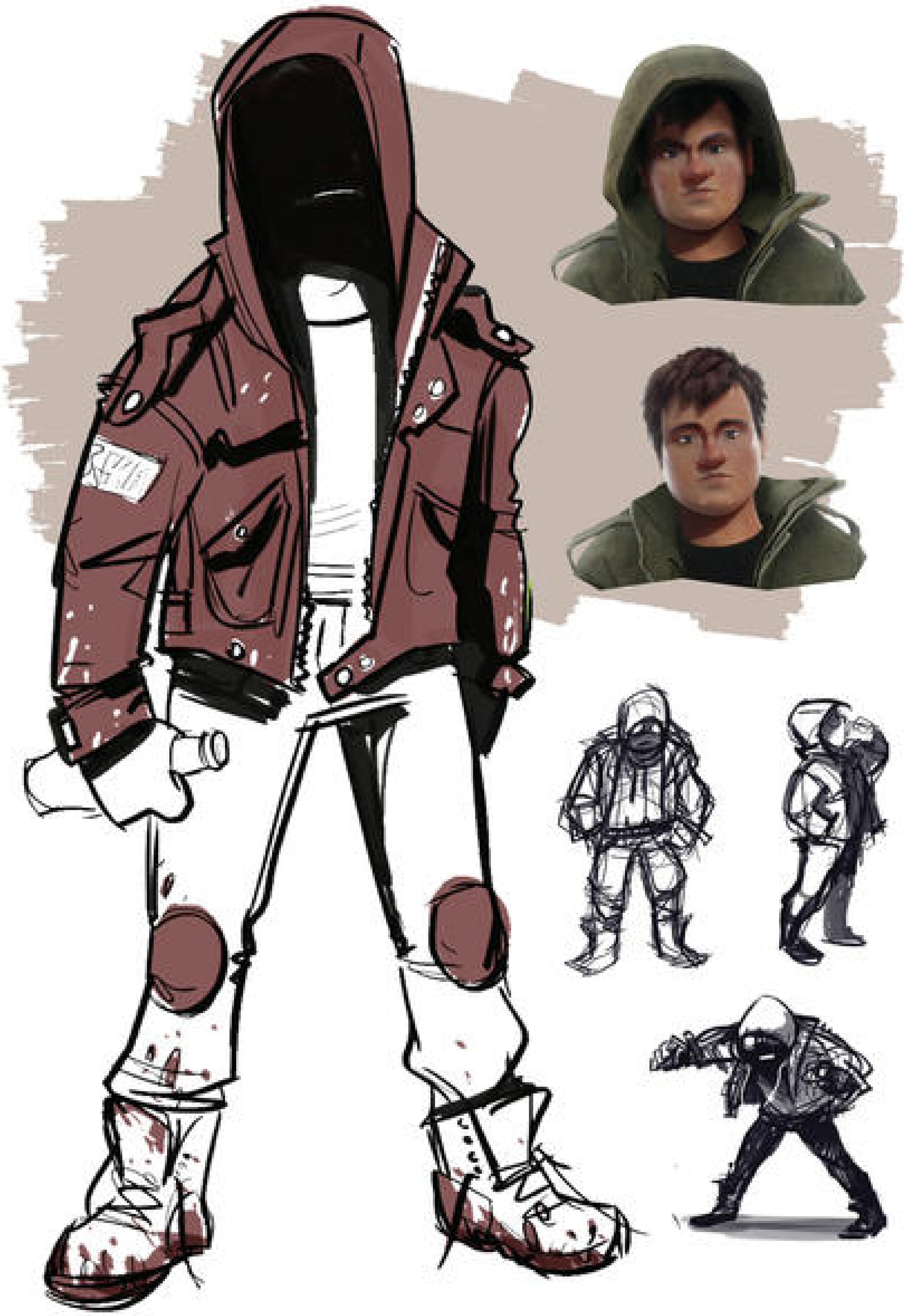




INSPIRATION

We wanted them to be characters who were more than just bogeymen and would be relatable on some level. They could have been Ash's friends if they hadn't gone down their destructive paths. They also had to be arrogant and obnoxious, but there would be some uncertainty underneath to make them feel more real.

ARTIST *BECKY ROBERTS*



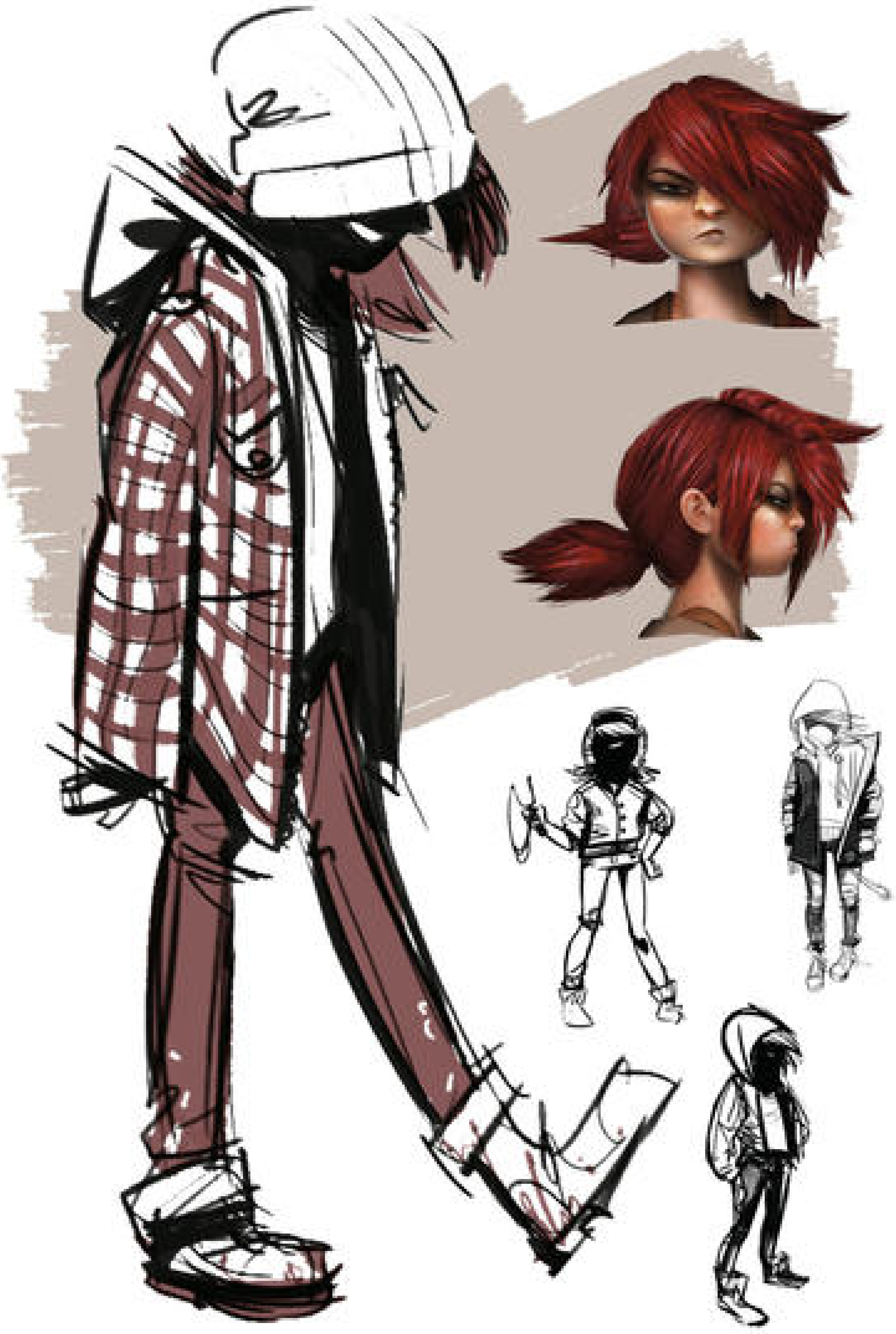
CHUCK

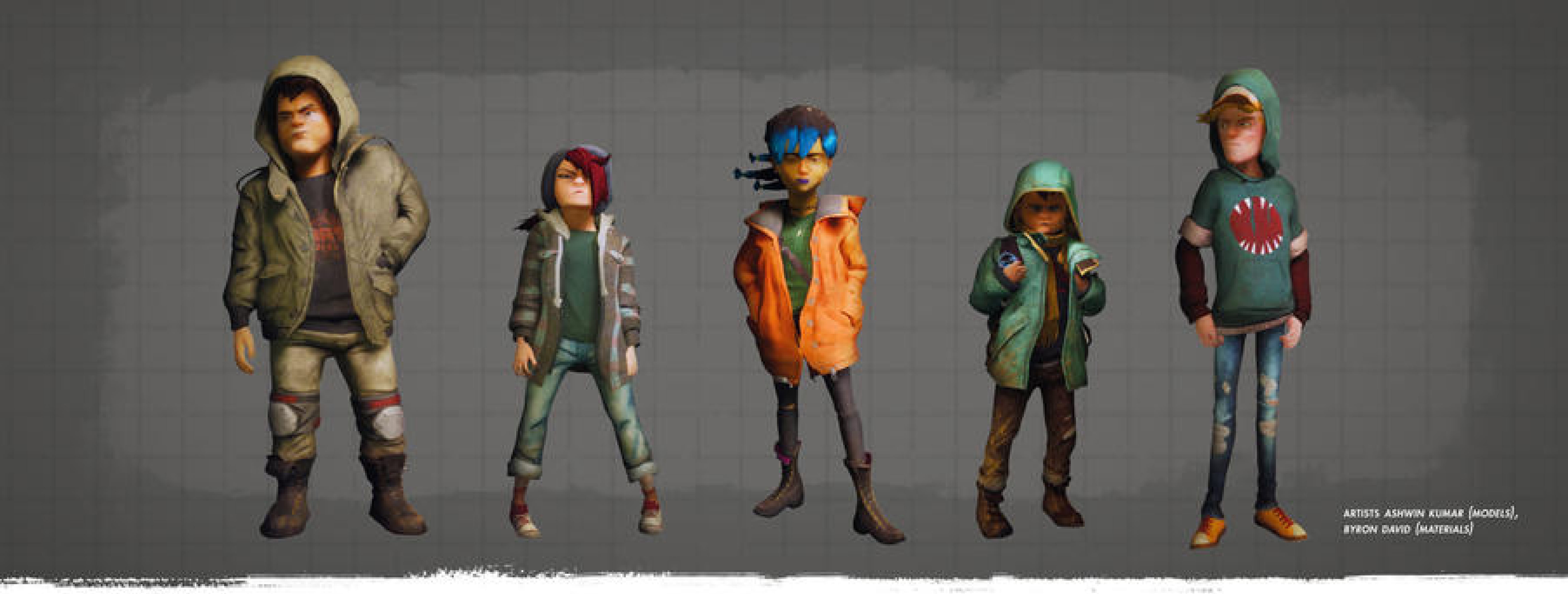
The muscle. Has trouble expressing himself except with his fists. Janie's older brother. He is often frustrated by his lack of control of the world around him. His size makes him self-conscious.

ARTIST BECKY ROBERTS (THIS PAGE AND FACING PAGE)

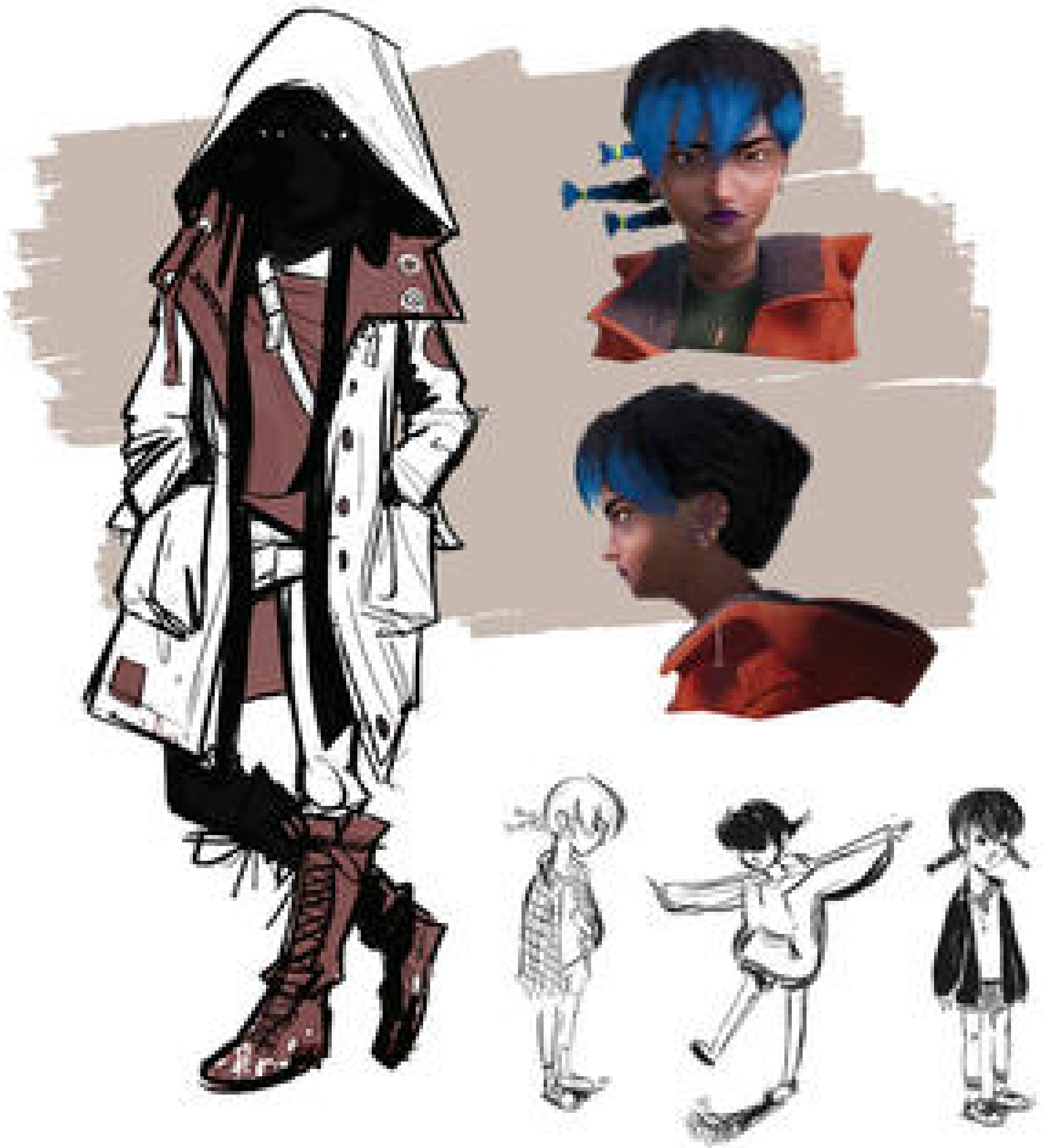
JANIE

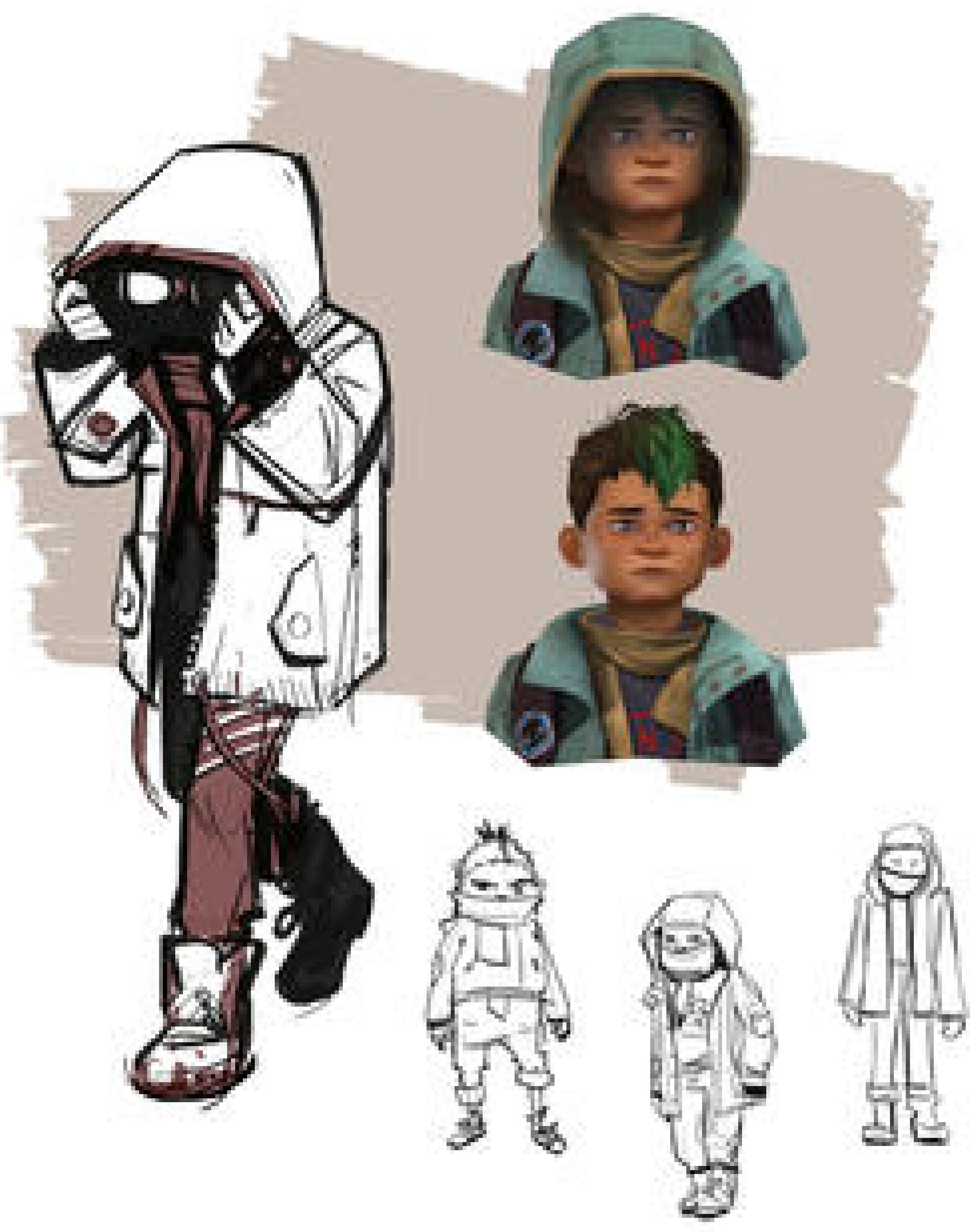
Wild and loud tomboy. Chuck's kid sister. Doesn't accept the authority of others. What she lacks in size she makes up for with lots of attitude—though she is often afraid.

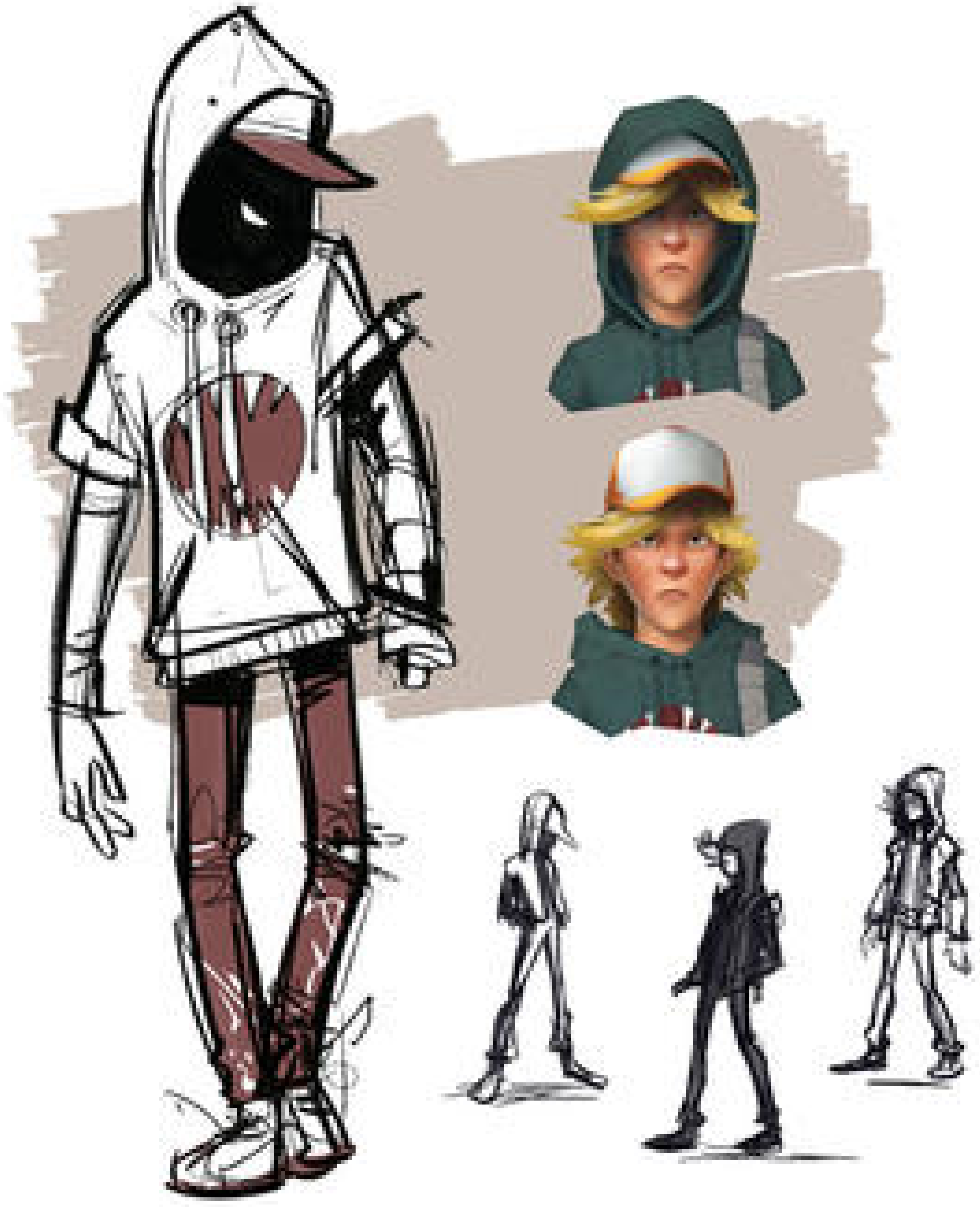




ARTISTS ASHWIN KUMAR (MODELS), BYRON DAVID (MATERIALS)







BEATRICE

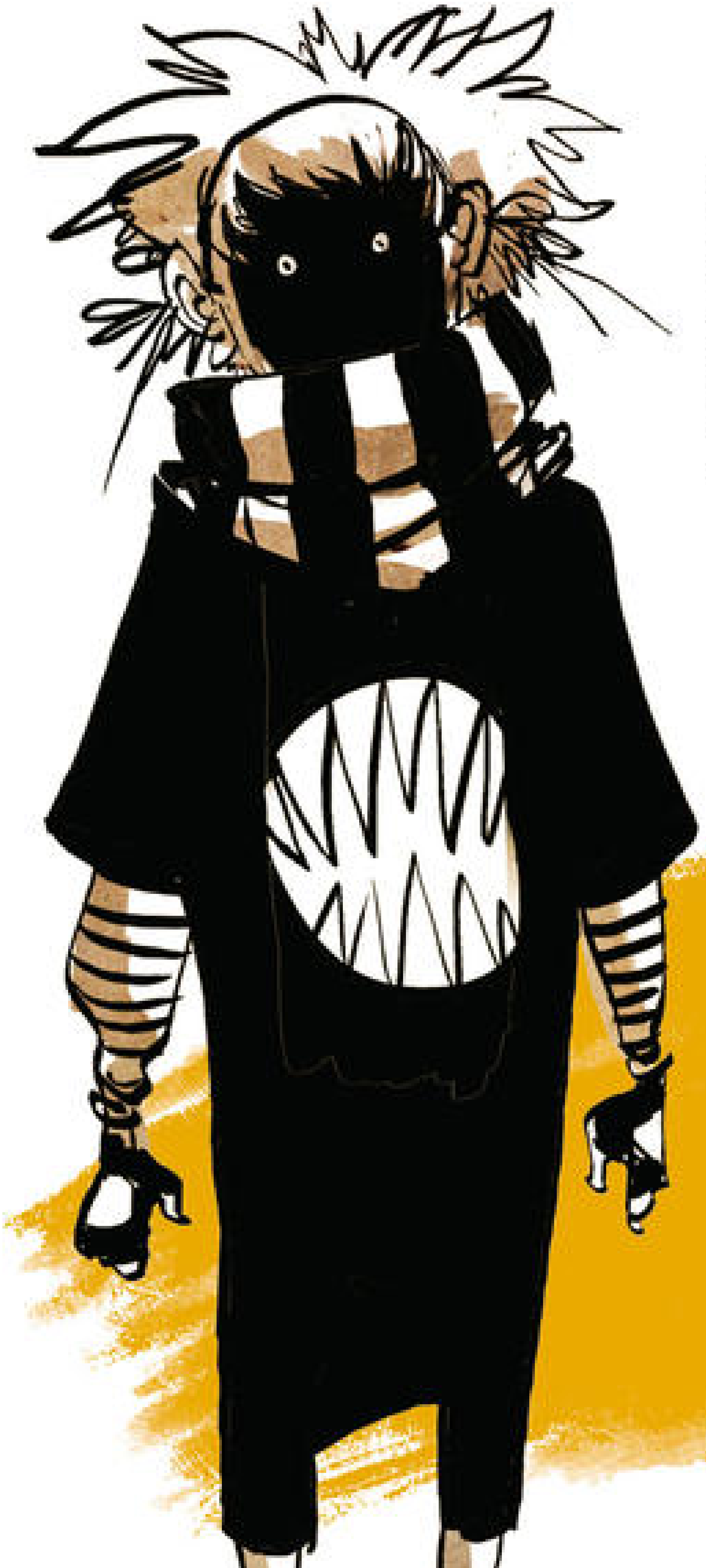
The cool, standoffish leader. Feels like she doesn't need anyone and keeps her emotions at a distance. She's clever and calculating—she often wants to go it alone.

FROGGY

Quiet and mysterious. At the bottom of the pecking order, he goes along with the bullies to avoid standing out. More insightful and observant than he seems.

ZACK

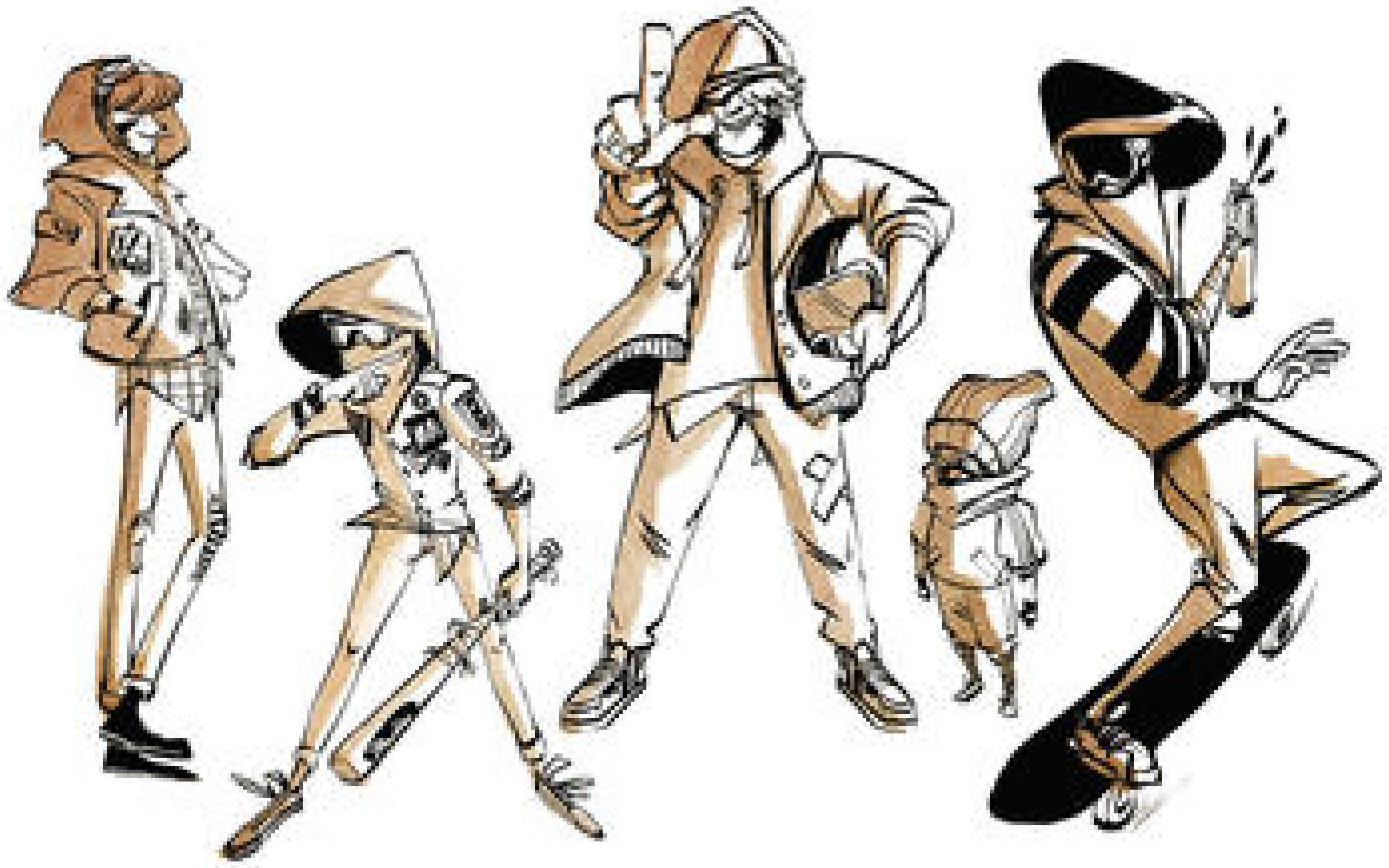
Athletic with a smart mouth, Zack's the funny guy who always wants to be in the spotlight. He acts cool and confident to impress the others.

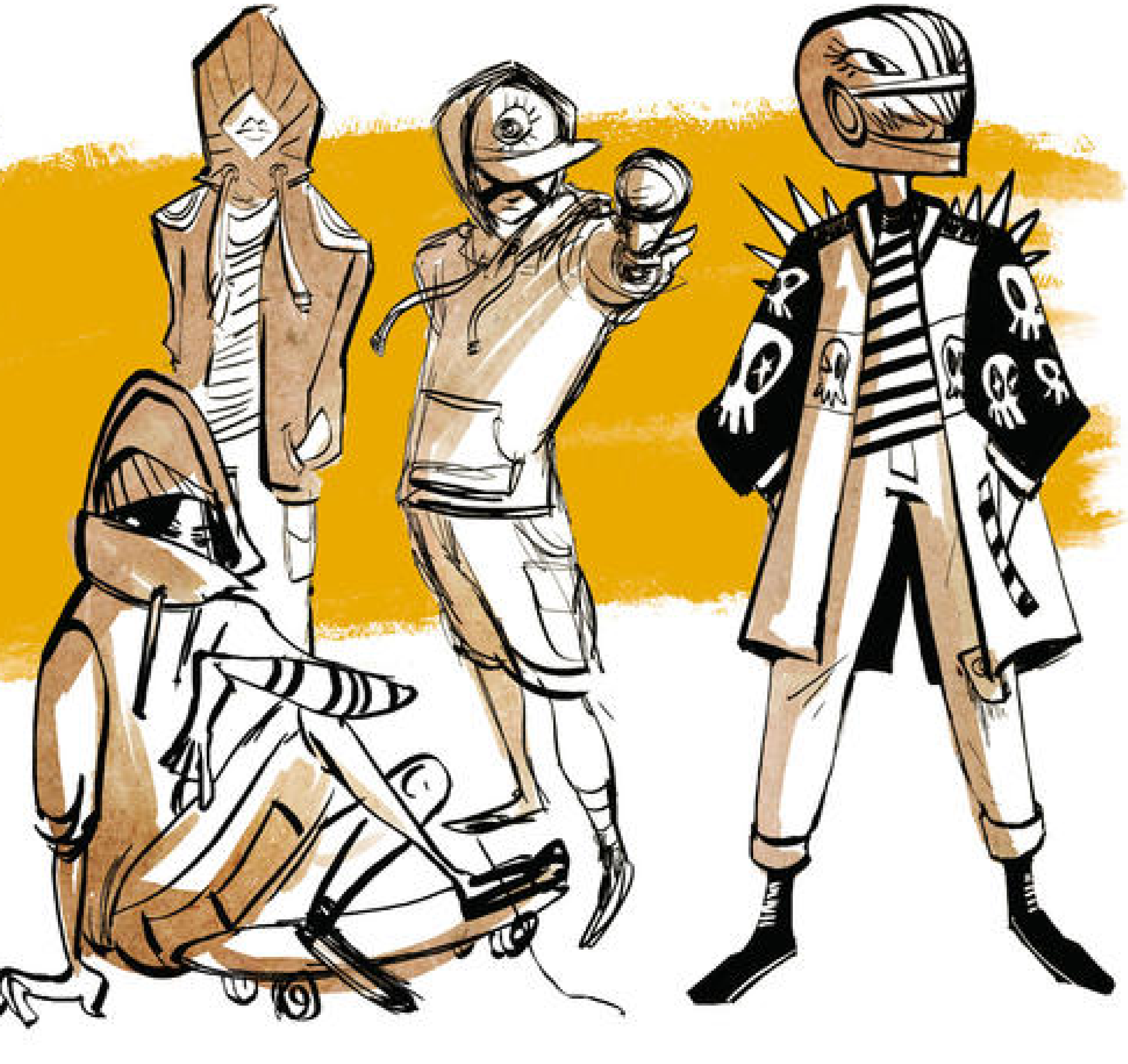


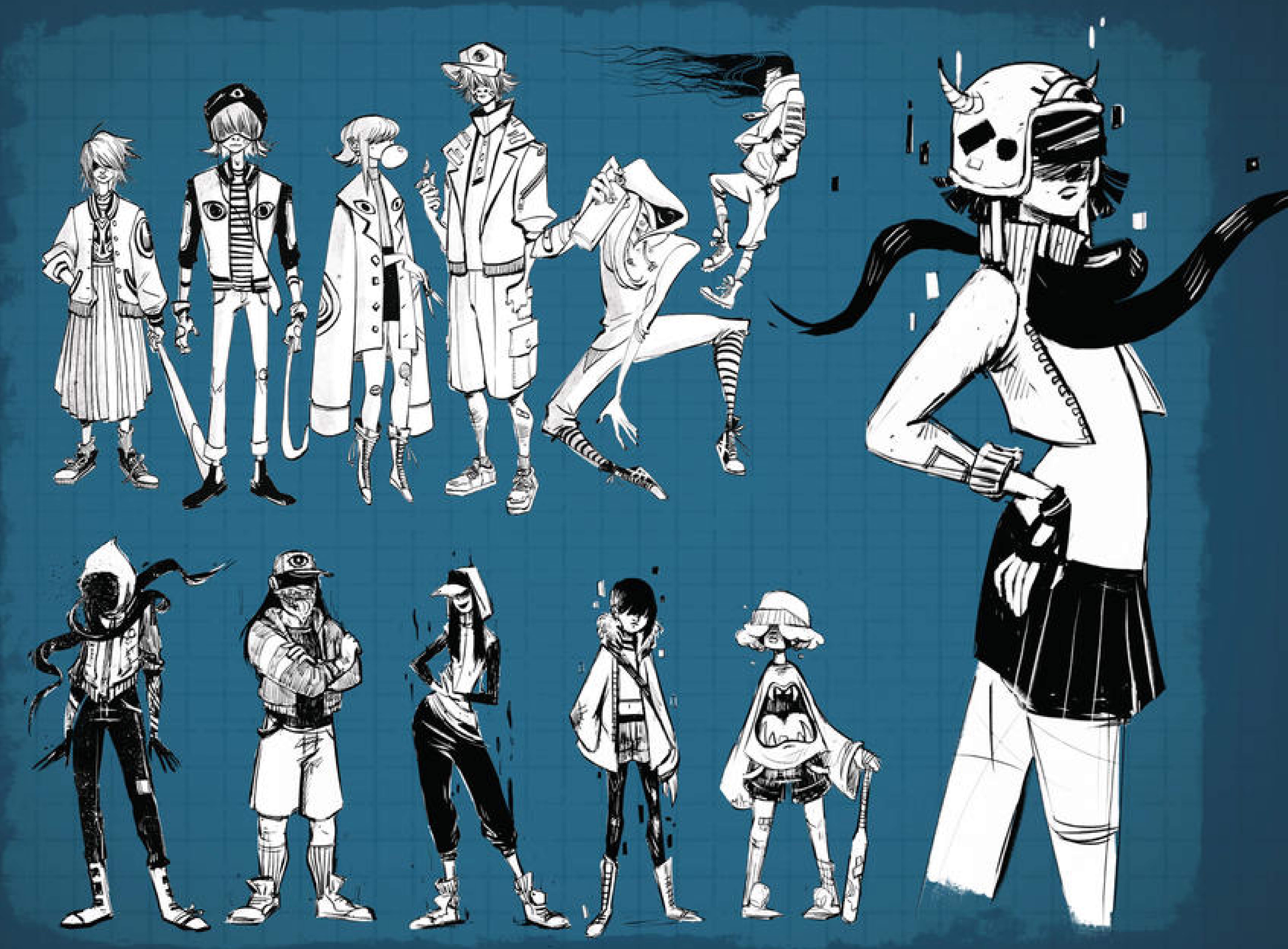
EARLY CONCEPTS

The early bullies were initially super edgy. A really swanky, stylish batch of angry teens. They had bats, studs, beanies, and skateboards, and were bent on looking much too cool.

ARTIST *LANCING LOVE CHEN (THIS PAGE AND FACING PAGE)*





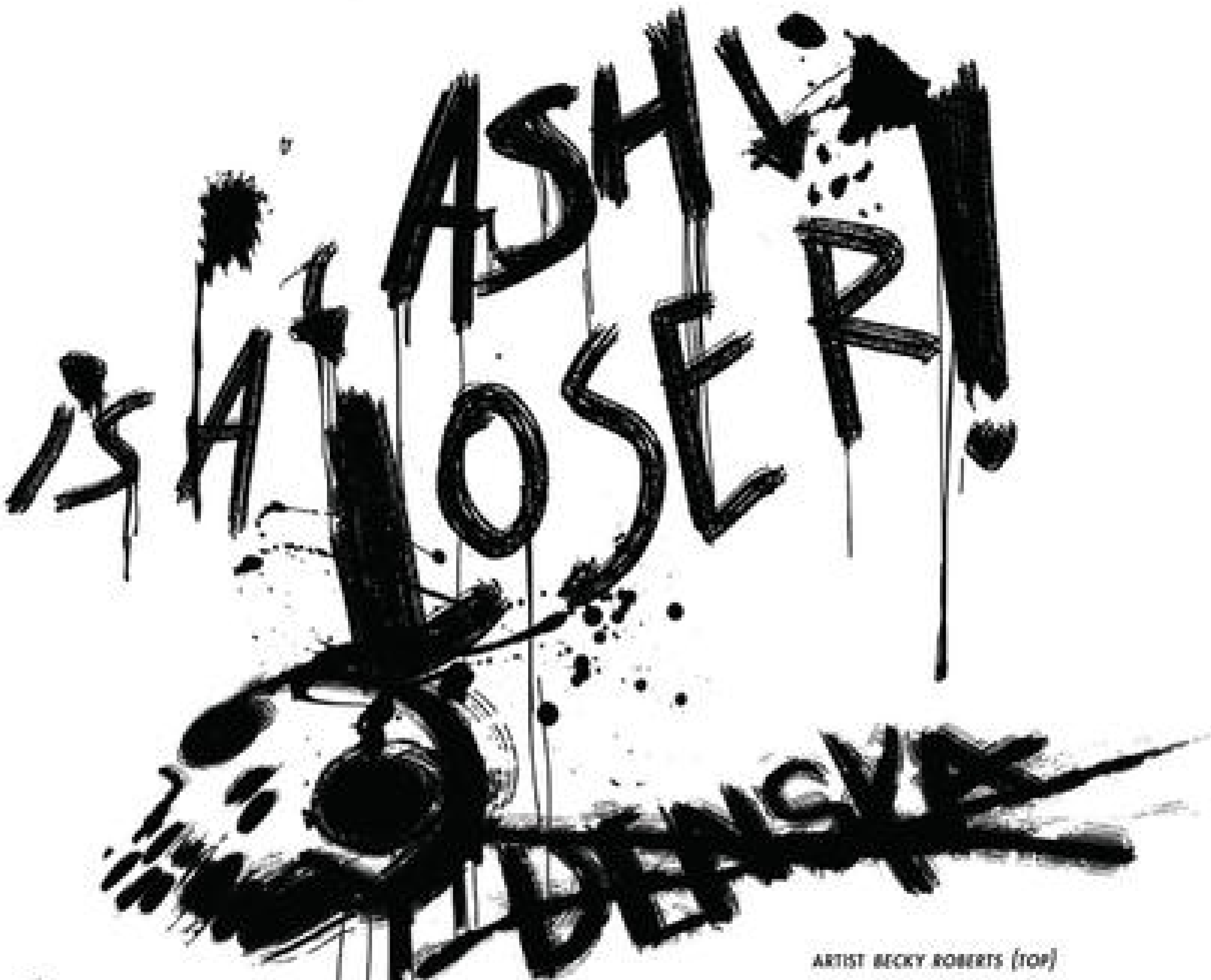


ARTISTS LANCING LOVE CHEN (TOP ROW), MAAIKE SCHERFF (BOTTOM ROW)

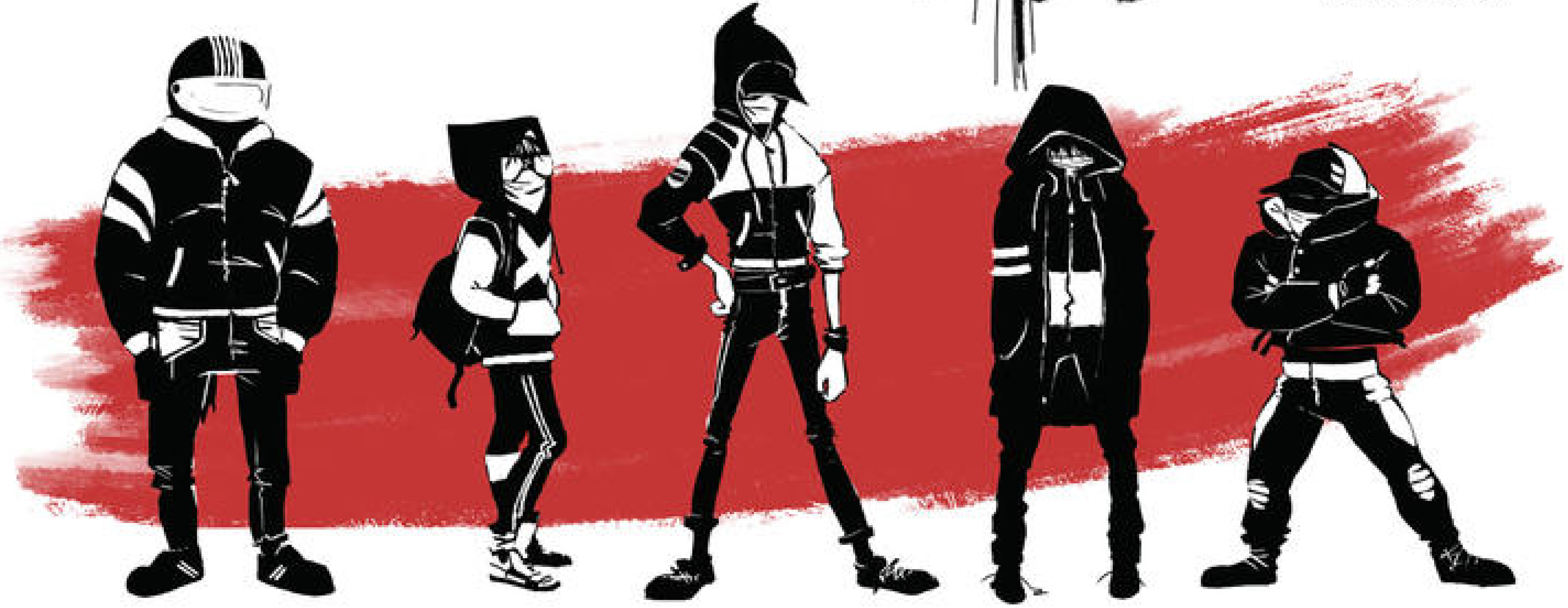
Since the Darkness became a primary part of our game mechanics, we explored briefly on how the Darkness would affect the bullies in some way, since their motives were along the same lines.

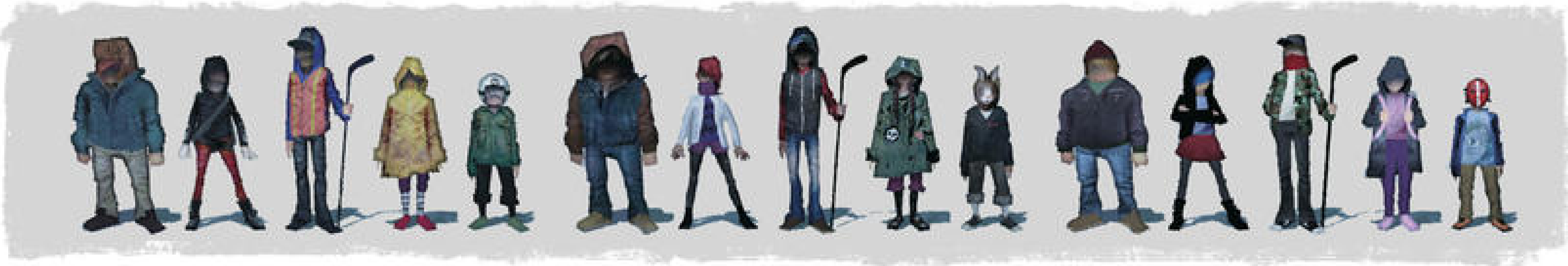
By obscuring their faces, we were trying to make the bullies feel more menacing and less human. In the end, it was more important that they still feel like kids in the neighborhood.

ARTIST *LUCIE ROBERTS (BELLOW)*

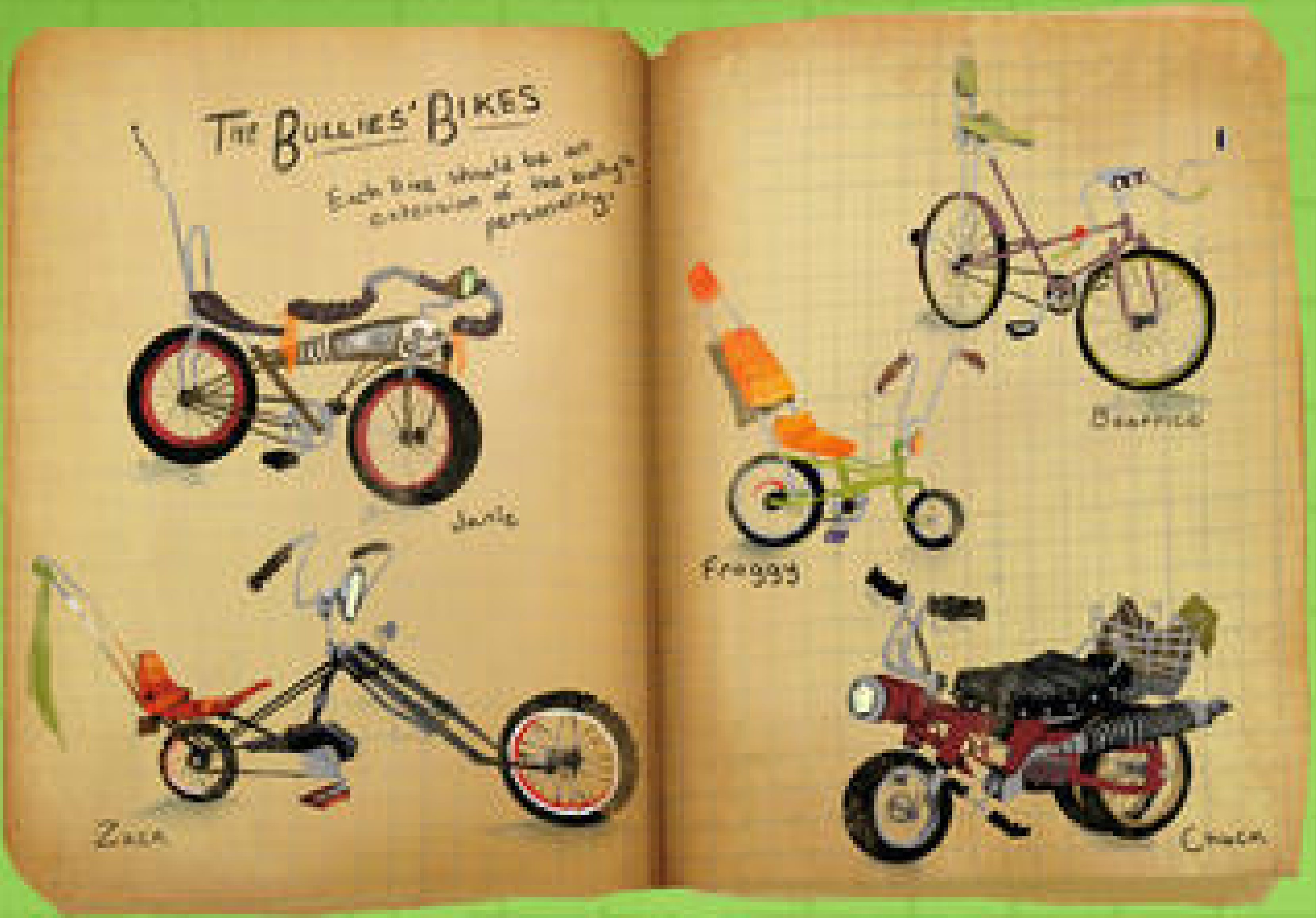


ARTIST *BECKY ROBERTS (TOP)*





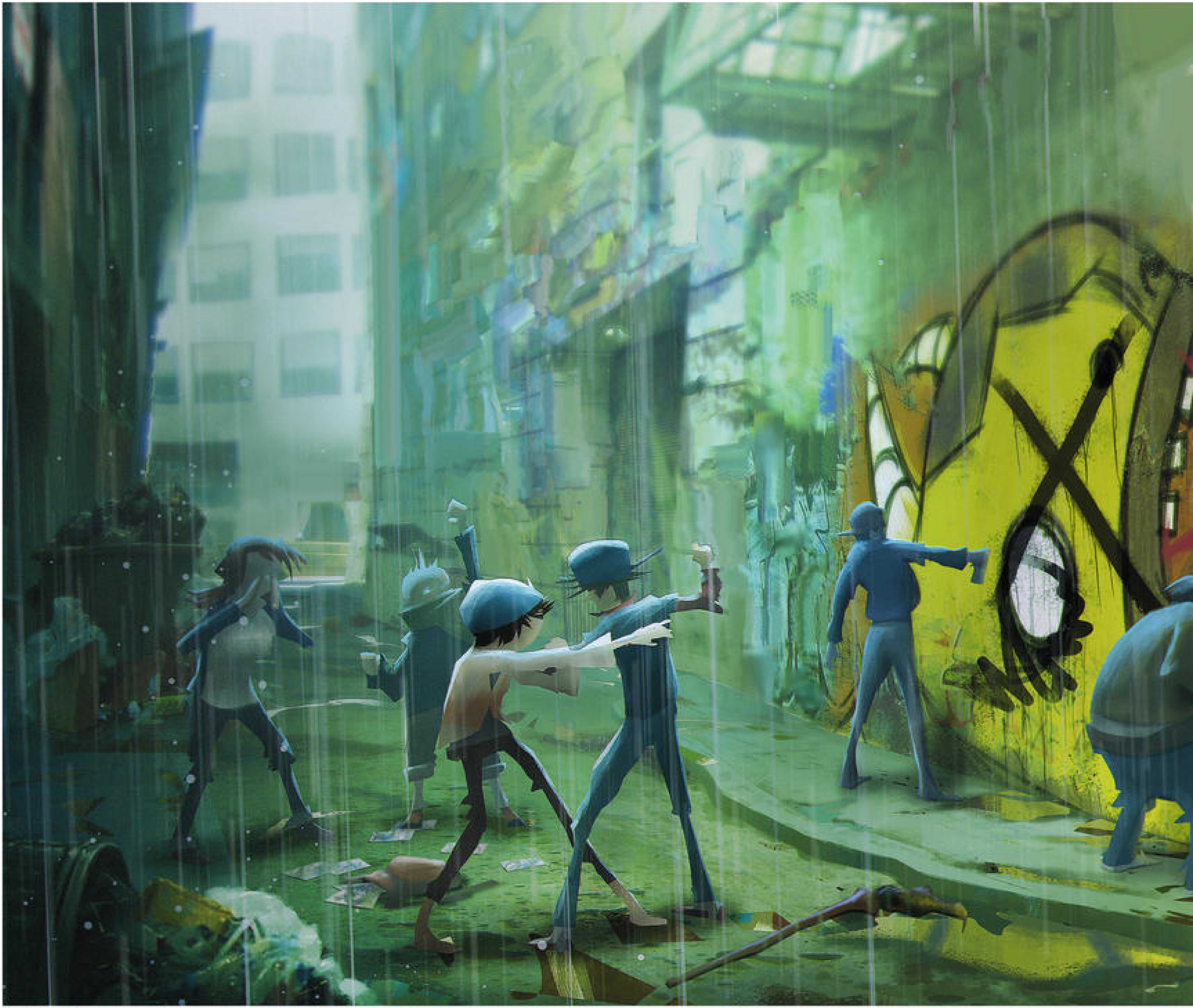
ARTIST *TAYLOR LAMBERT*


The Bullies' Bikes
Each bike should be an extension of the bully's personality
Janie
Zack
Beatrice
Froggy
Chuck

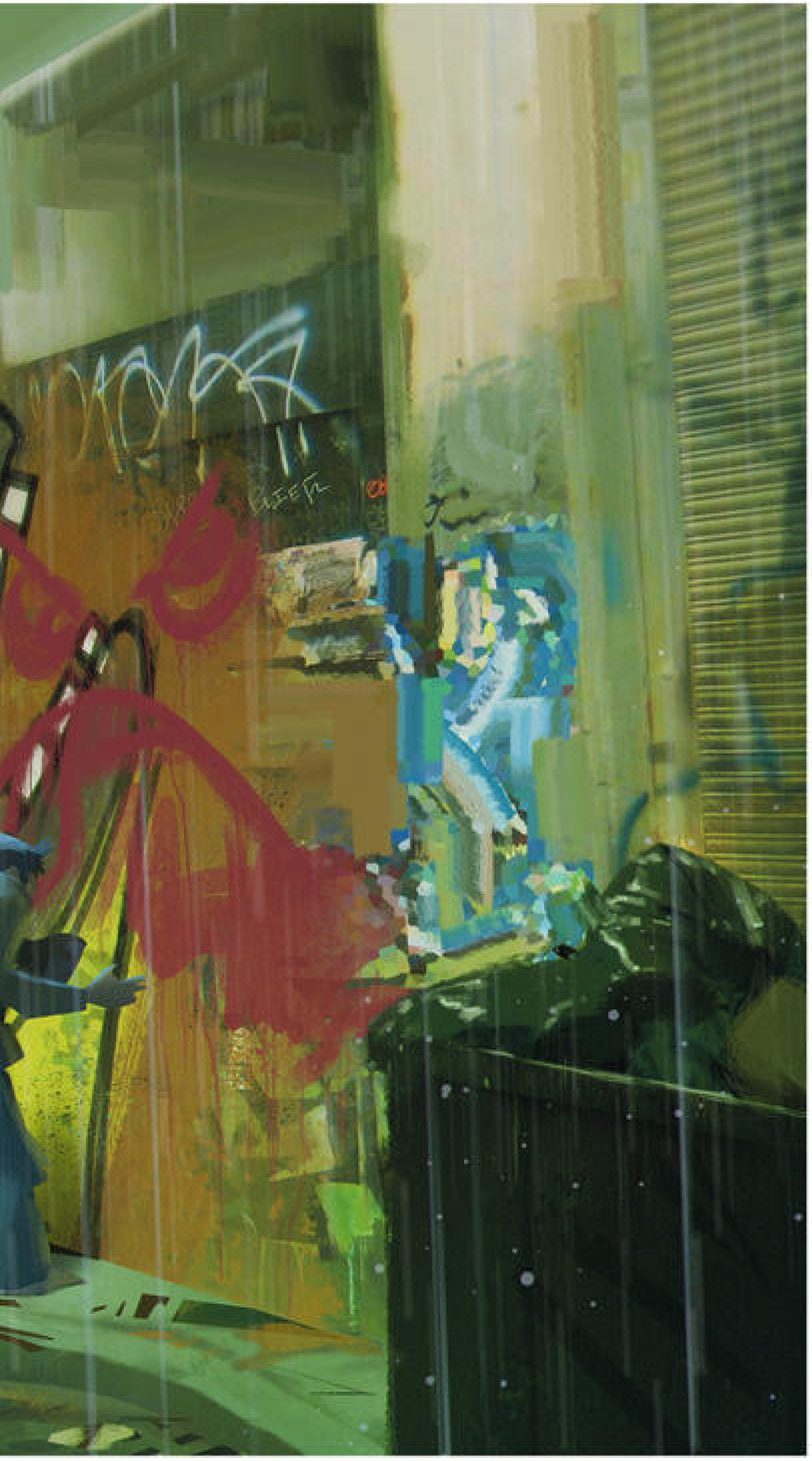
BULLIES' BIKES

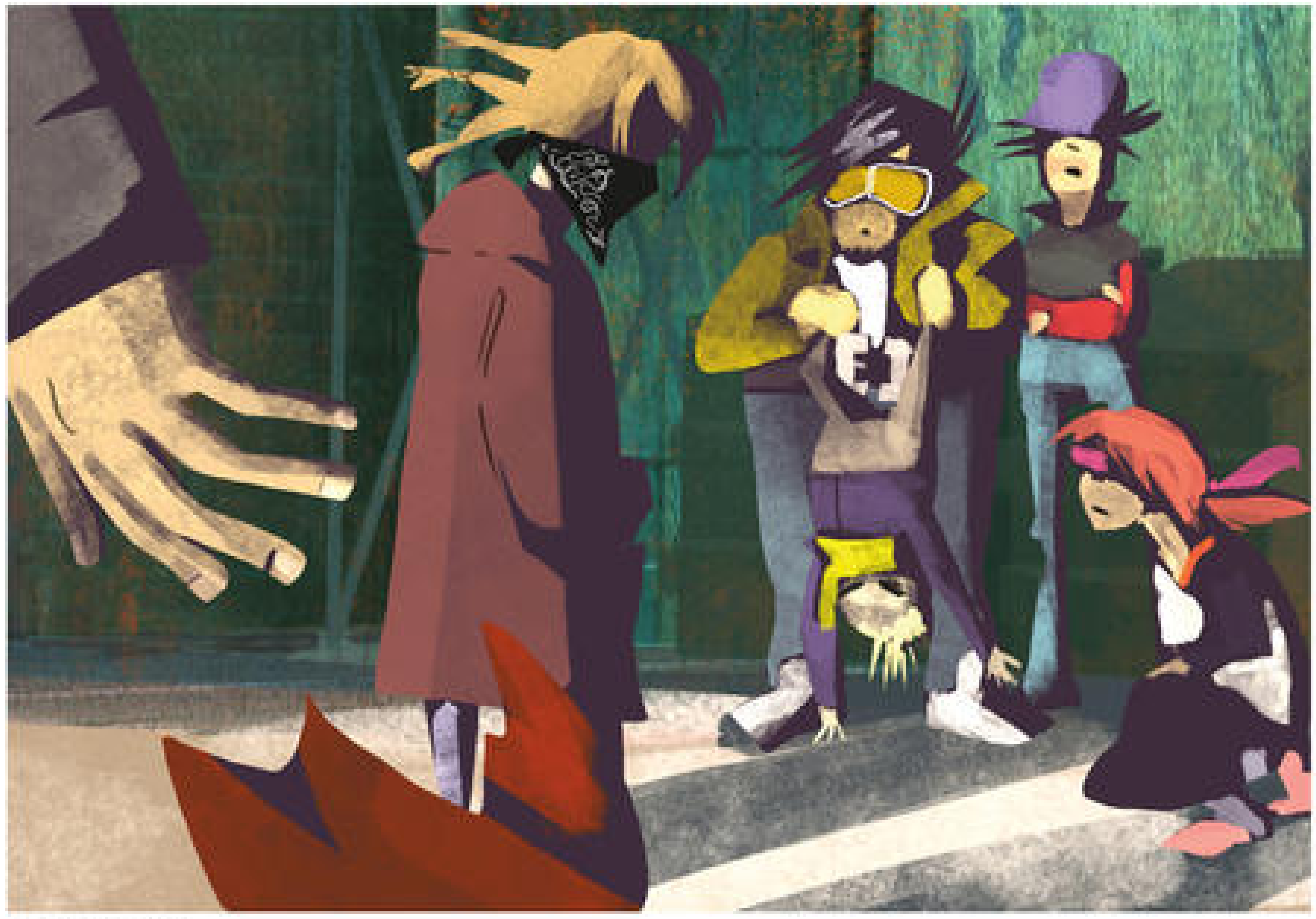
Each bully is like their bike (*top to bottom*): Beatrice is aloof, Janie is aggressive, Froggy is plucky, Zack is a laid-back slacker, and Chuck is powerful (and too lazy to pedal).

ARTIST *LUCIE ROBERTS*

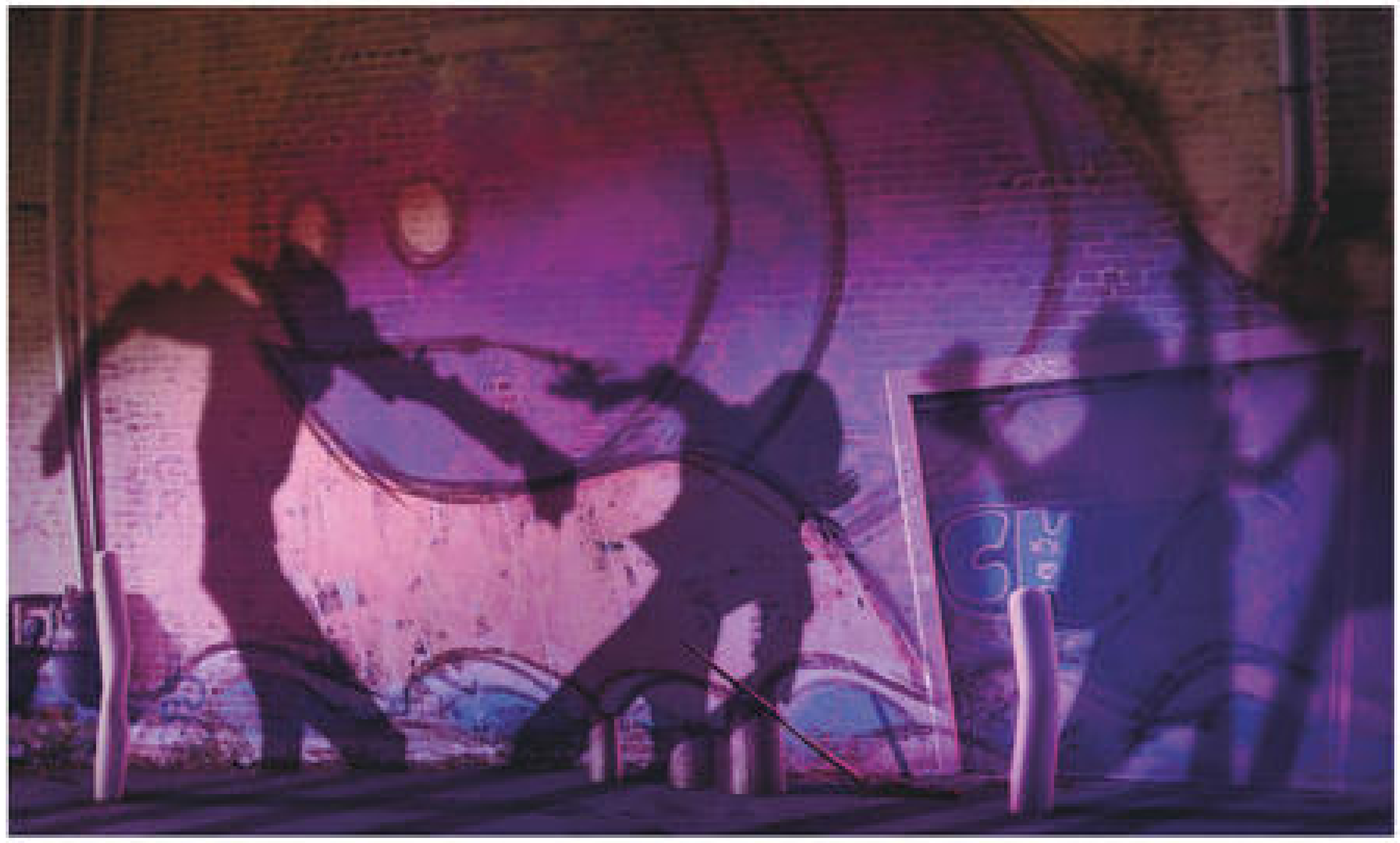


ARTIST TAYLOR LAMBERT





ARTIST *LUCIE ROBERTS*



ARTIST *TAYLOR LAMBERT*

CONCEPT ART

These pieces represent the early exploration of bullying in the context of our game. Showing the other characters in the game and how they oppress Ash and his creativity took many revisions, and these pieces were pivotal in guiding the mood as we figured out the layout in key cutscenes.

FLASHBACK ANIMATION BY ODDFELLOWS STUDIO

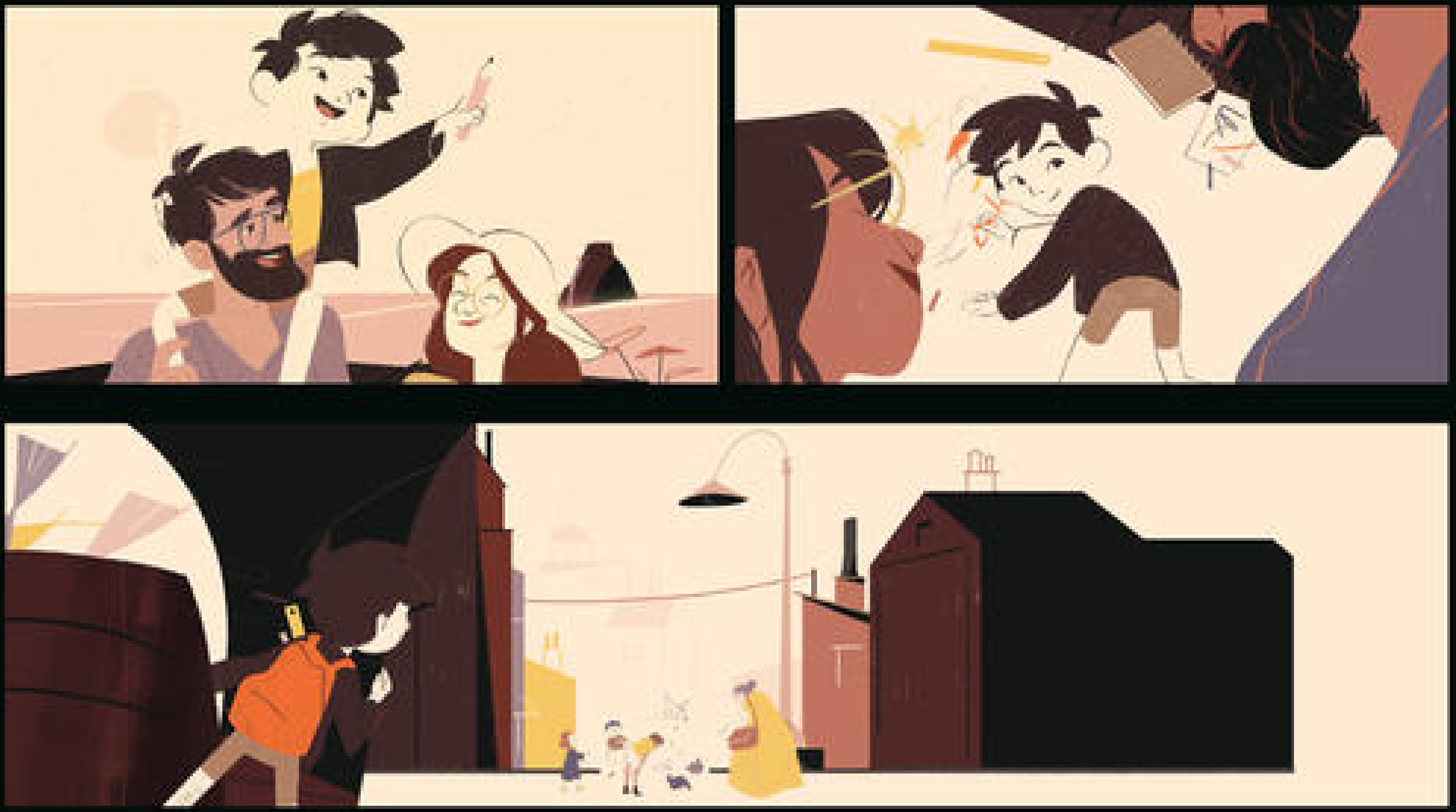
We soon realized that to deliver the depth that we wanted with the bullying theme that we needed to show more backstory to the bullies themselves. Taking an optimistic approach that these characters were not naturally bad kids—but were instead the product of difficult challenges in their upbringing, in contrast to Ash. Leveraging the idea that Ash views and "feels" memories through his art, we chose to show him seeing into the memories of the bullies when he and other characters are touching the brush simultaneously.

To unify the flashback approach (for both Ash and the bully characters) we worked with an external animation studio called Oddfellows. They were truly wonderful and collaborative partners. We loved working with them and observing their process. We are so happy with how they turned out and work in the game.

ASH BACKSTORY CONCEPT

We've always felt it was important to show Ash's relationship to his parents in the game; their support and love for him is what gives him the strength to persevere (it is also what stops him from becoming despondent and aggressive like the bullies). His backstory also illuminates where his idealism comes from: he is continually reaching back to the Denska of his childhood, which was full of community, nature, diversity, and art.

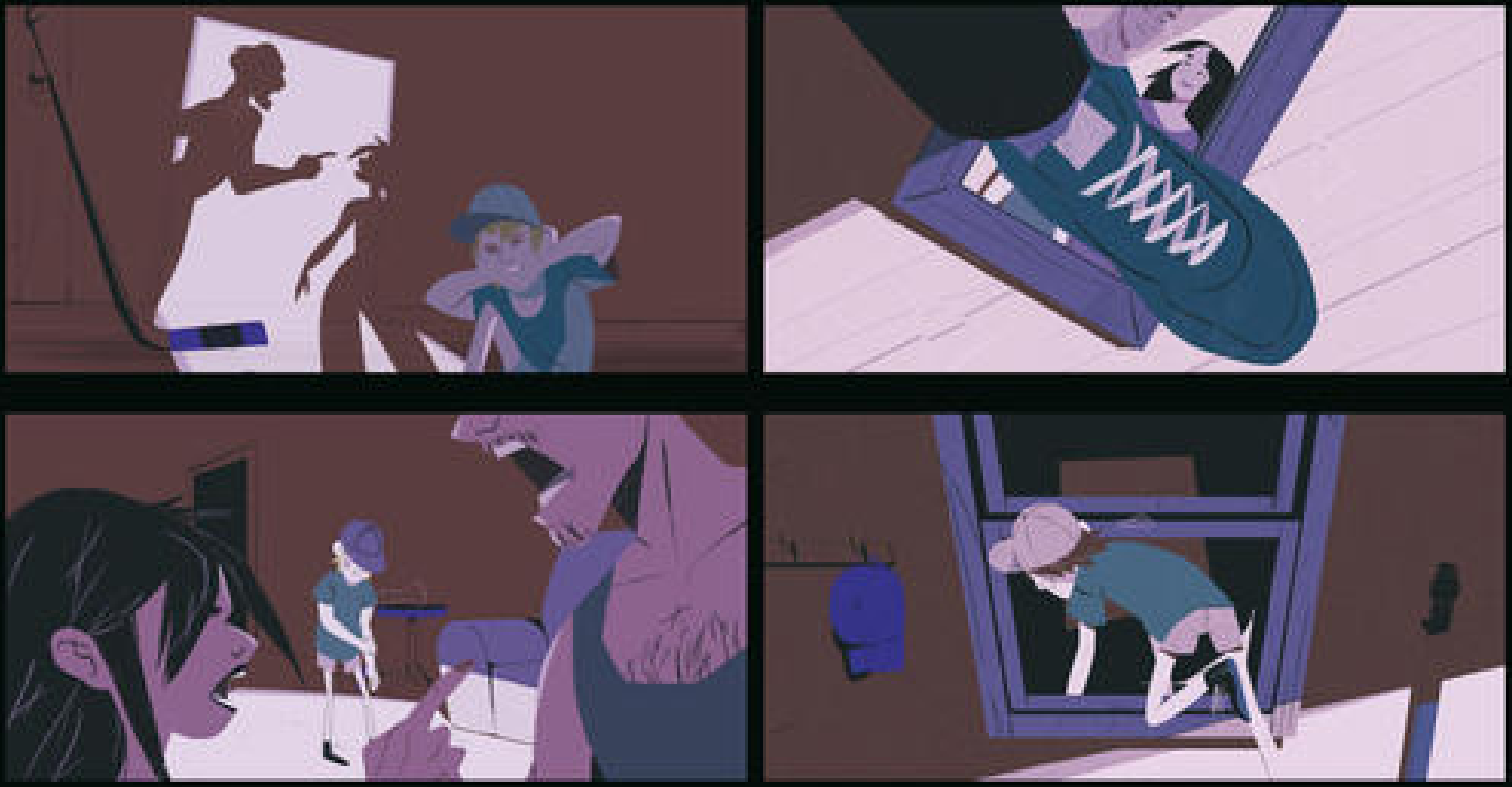
ARTIST *ODDFELLOWS STUDIOS*



ZACK BACKSTORY CONCEPT

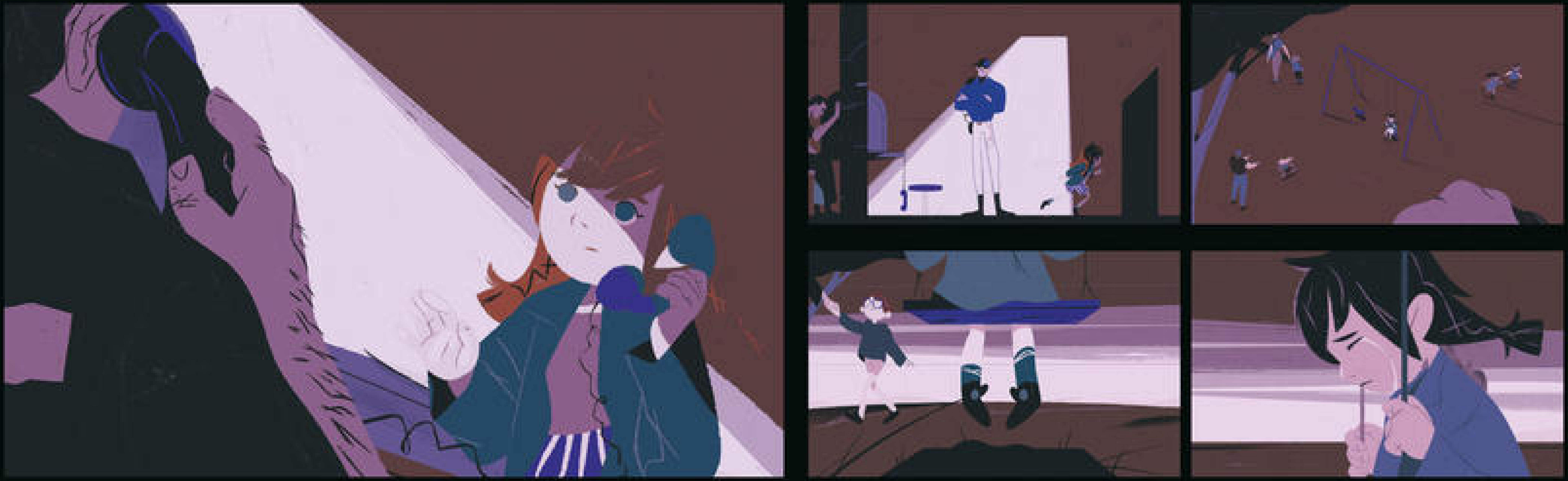
The team had a clear idea of Zack's unhappy home life early on. We imagined that his household was abusive, and we conceived the image of his parents screaming at each other, maybe even fighting about *him*. In Zack's young mind his mother and father became angry, shadowy monsters, and over time Zack became a frequent runaway. He would go anywhere to avoid that place, sometimes to haunt the streets of Denska with the other bullies.

ARTIST *ODDFELLOWS STUDIOS*



BEATRICE BACKSTORY CONCEPT

These compositions are meant to provoke emotion as well as tell the story. Beatrice's childhood loneliness can be felt in how tiny she is in the wide shot, but seeing her eyes in the close-up helps us to connect with her. The content of Beatrice's relationship with her father is striking as well: if Beatrice loves someone and is loved, it's easier for the audience to feel compassion for her.

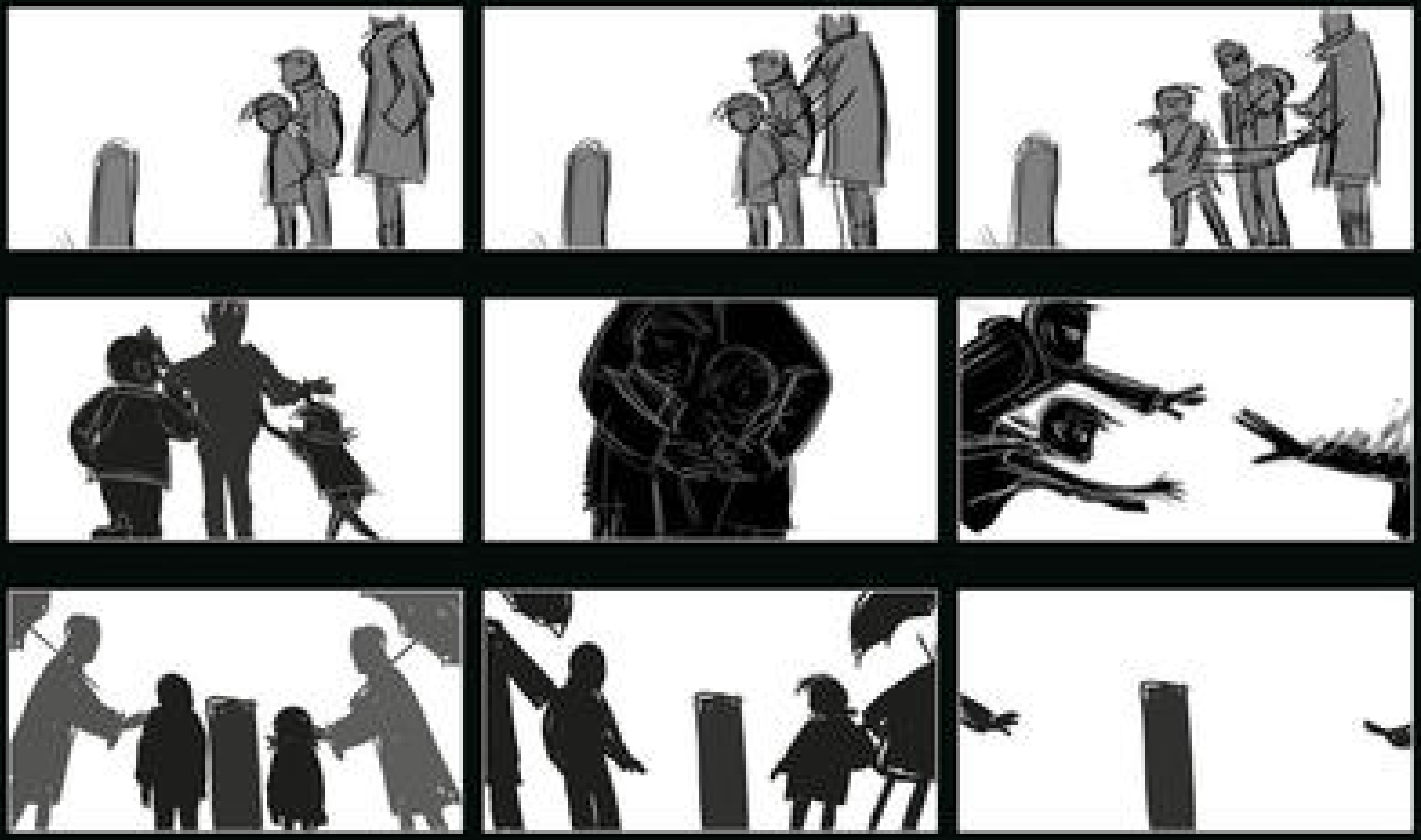


ARTIST ODDFELLOWS STUDIOS

JANIE AND CHUCK BACKSTORY CONCEPTS

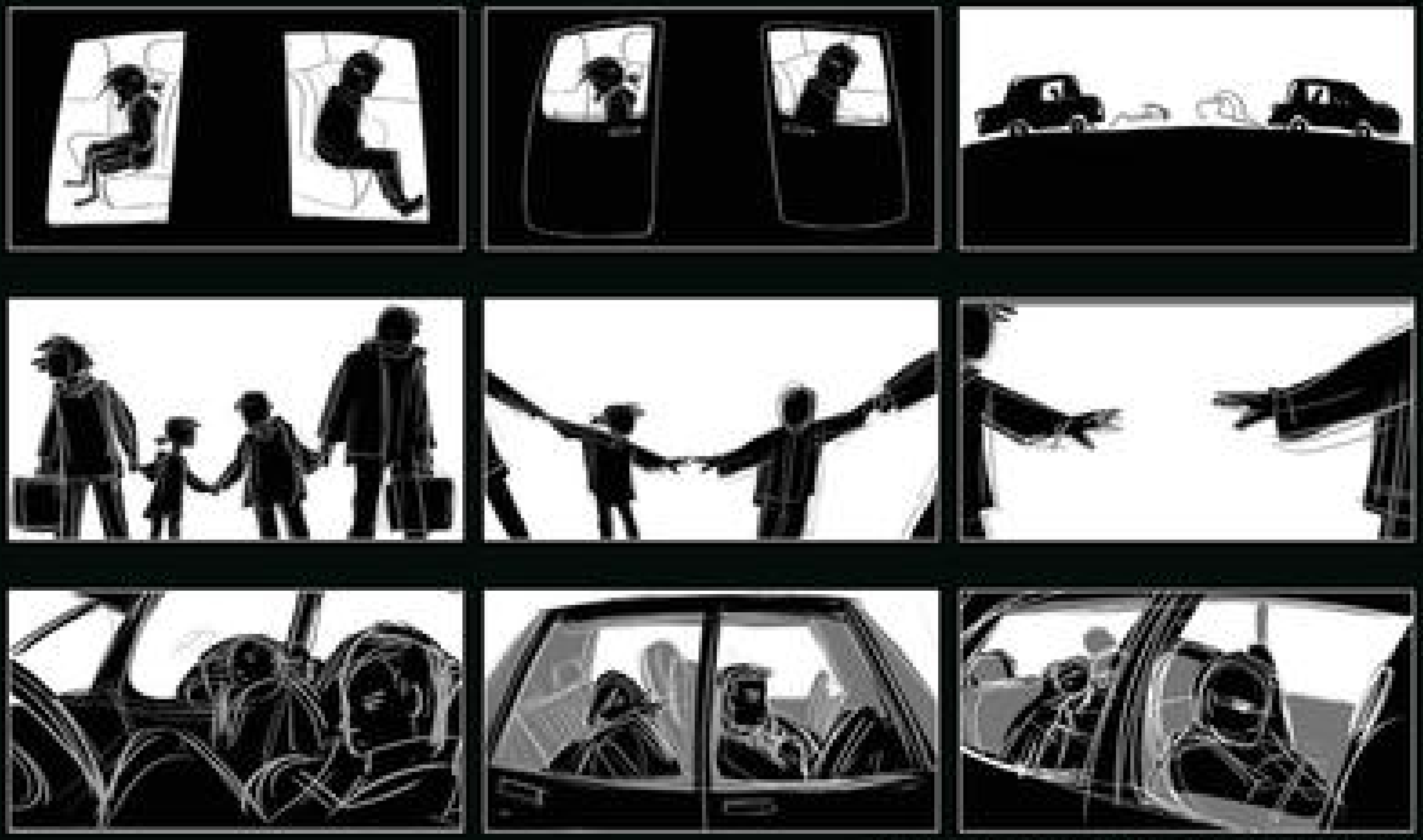
STORY ONE

First we considered that Janie and Chuck could have experienced the death of a parent or older sibling—they lost someone who understood them but now were being shuffled around to different foster homes where they couldn't fit. Or possibly, the two were being split up into different families and could only be together in the late hours roaming the streets of Denska.



STORY TWO

In the final version, their parents divorced and the children were forced to pick between them, but the siblings stayed together. We thought it made sense for this trauma to leave Janie angry and untrusting, and Chuck a frustrated older brother—he wants to protect Janie but he's just a kid himself. In the end of this memory they are being driven into the unknown, away from home.

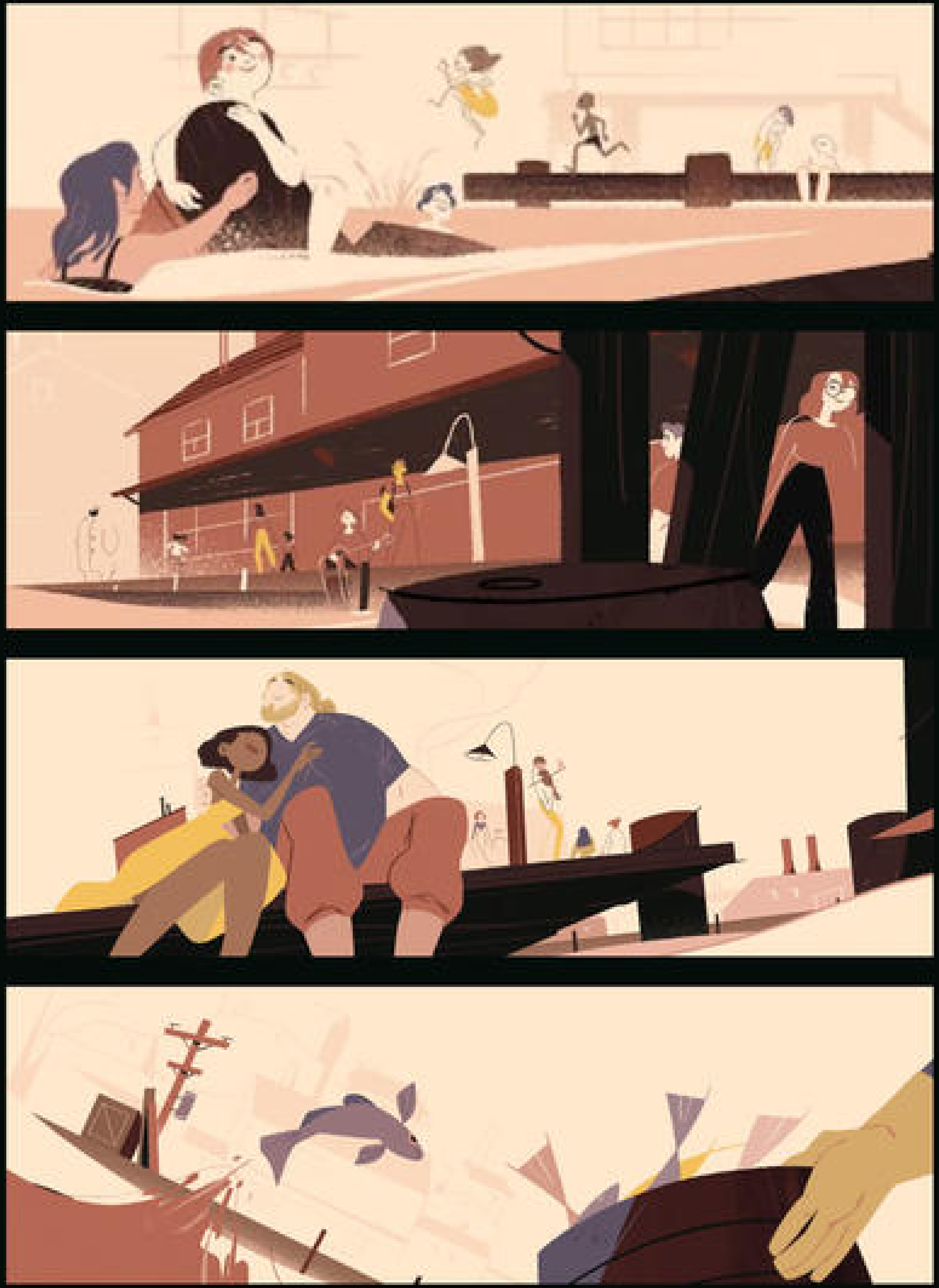


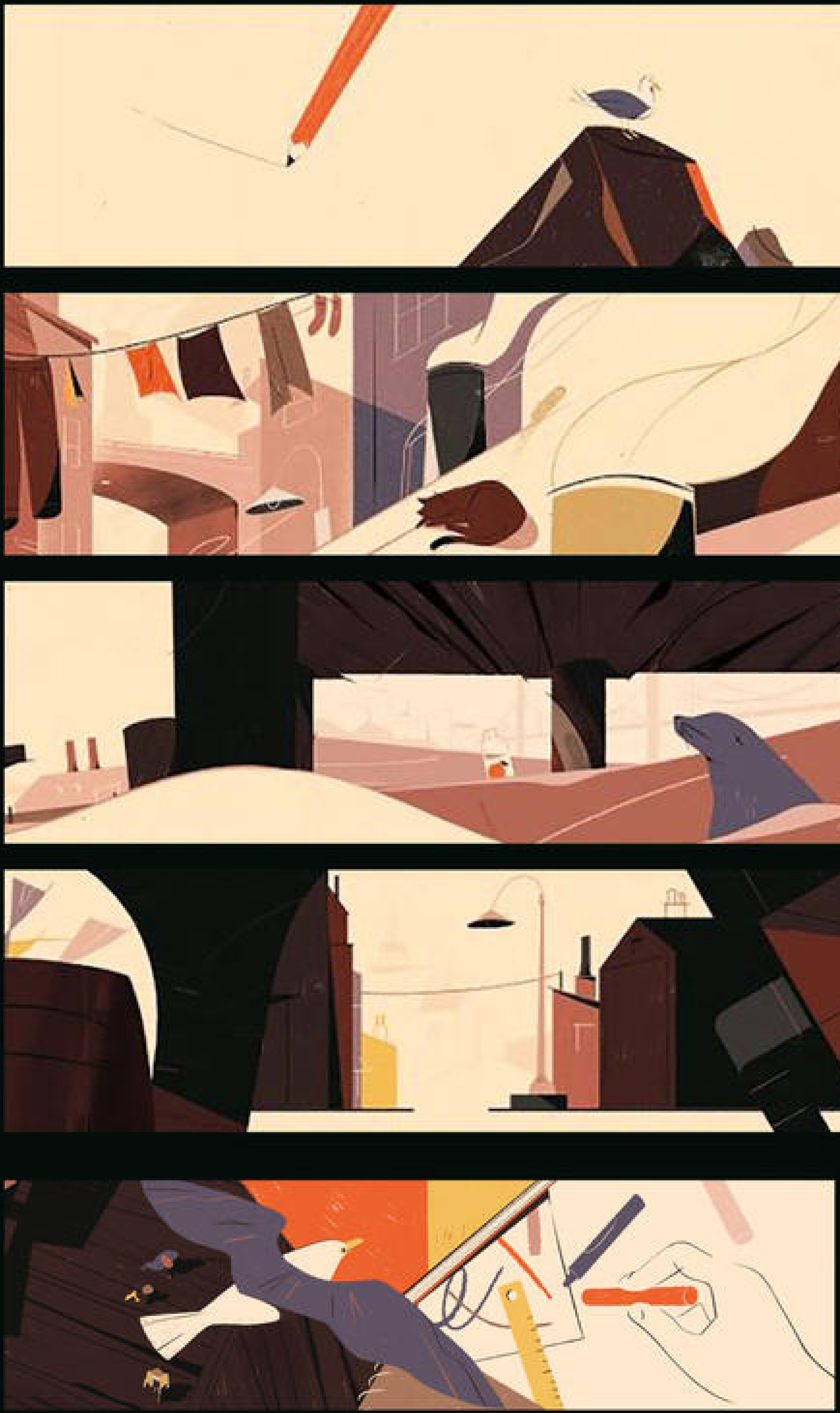
ARTIST BECKY ROBERTS (STORY ONE AND STORY TWO)

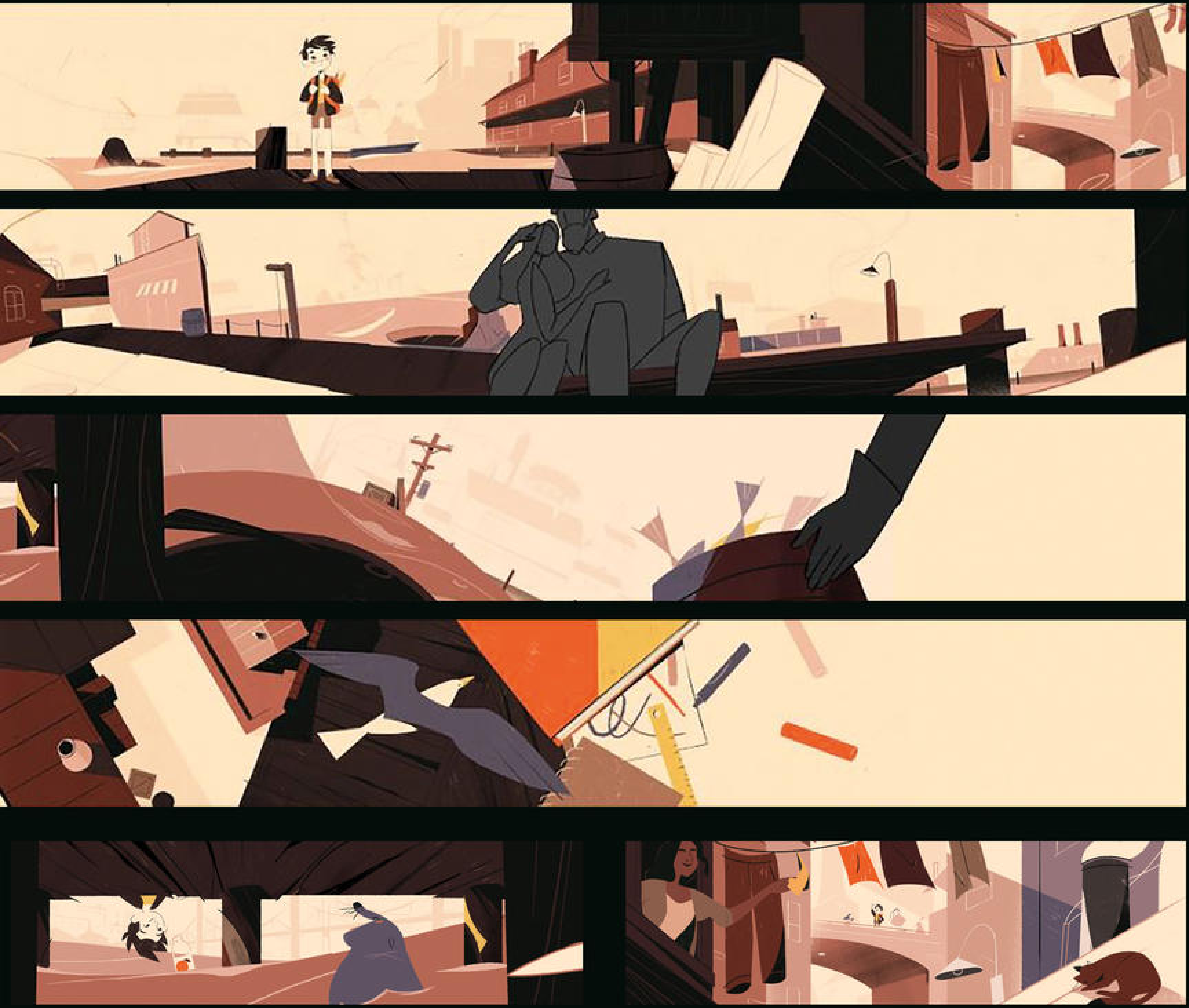
STORYBOARD CONCEPT

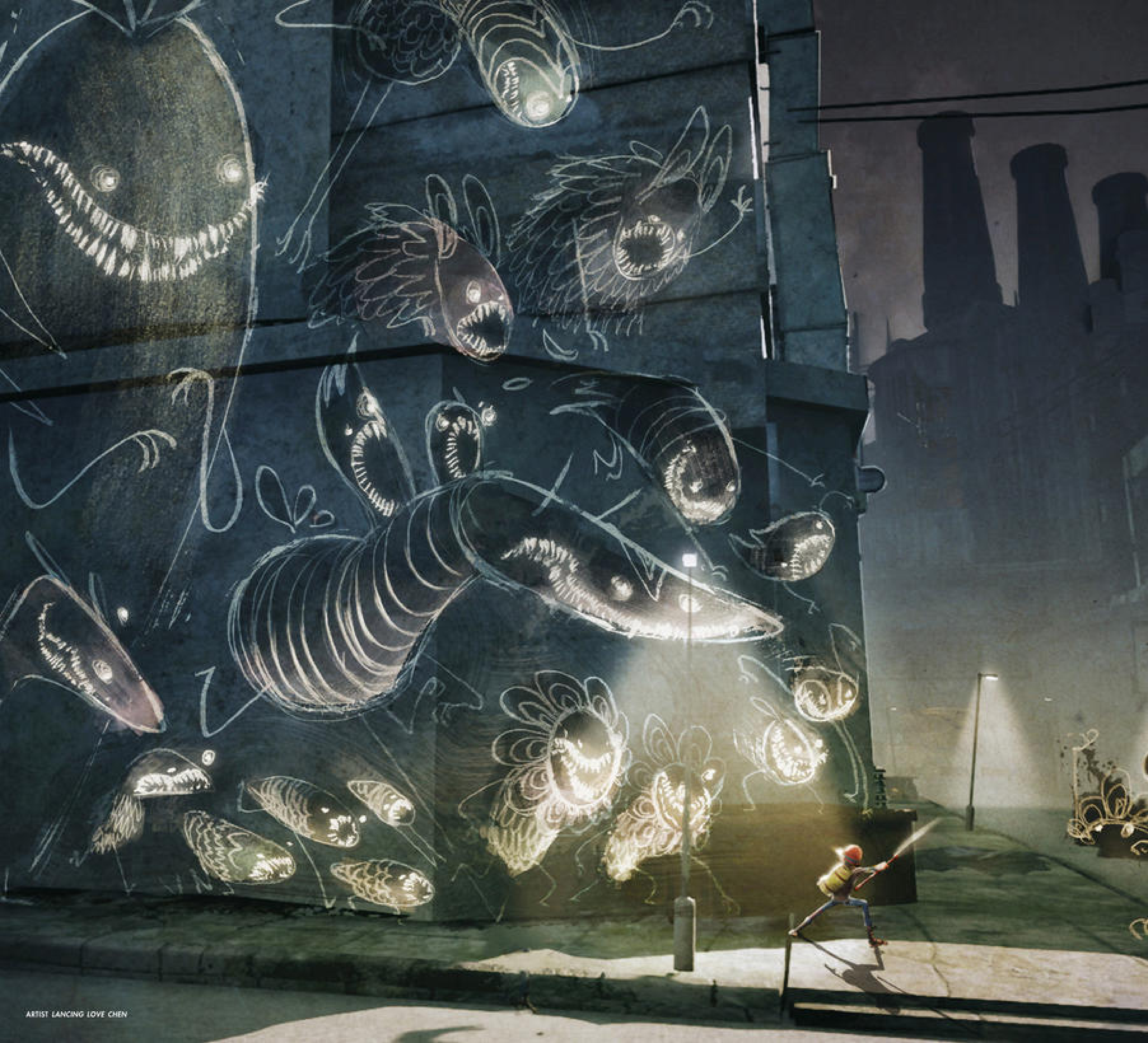
Oddfellows really drove the visual language here to use abstraction with their shape and movement. We really wanted it to feel like a sketch unraveling from left to right as it flows through the town and picks up on many happy memories that Ash has of Denska. This moment is so important as it's when we show Denska as a vibrant and lived-in fishing town—through the nostalgic lens of Ash's memories. It is meant to help incentivize the player to want to share Ash's dream of painting the town "back to life."

ARTIST *ODDFELLOWS STUDIOS*

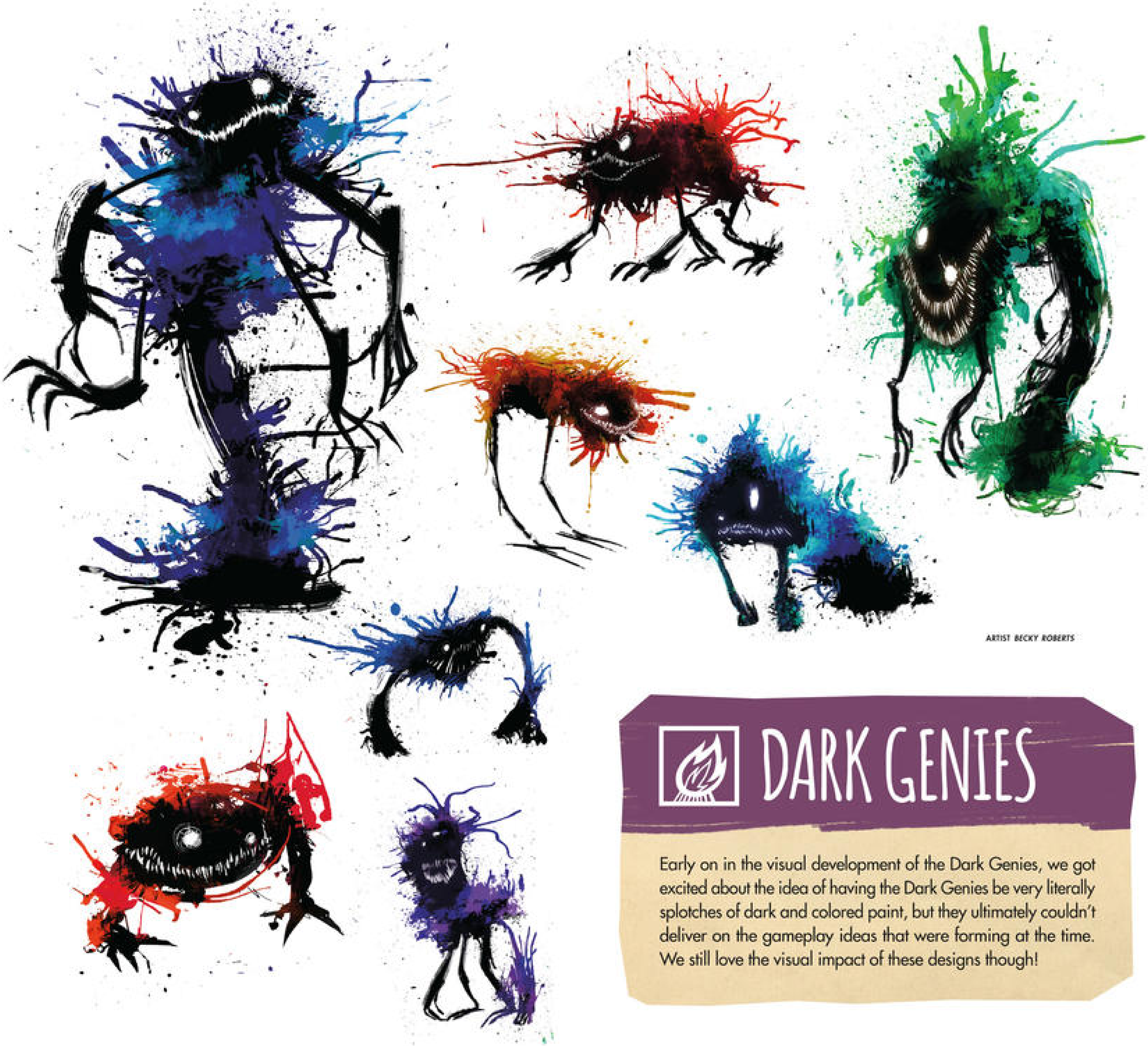








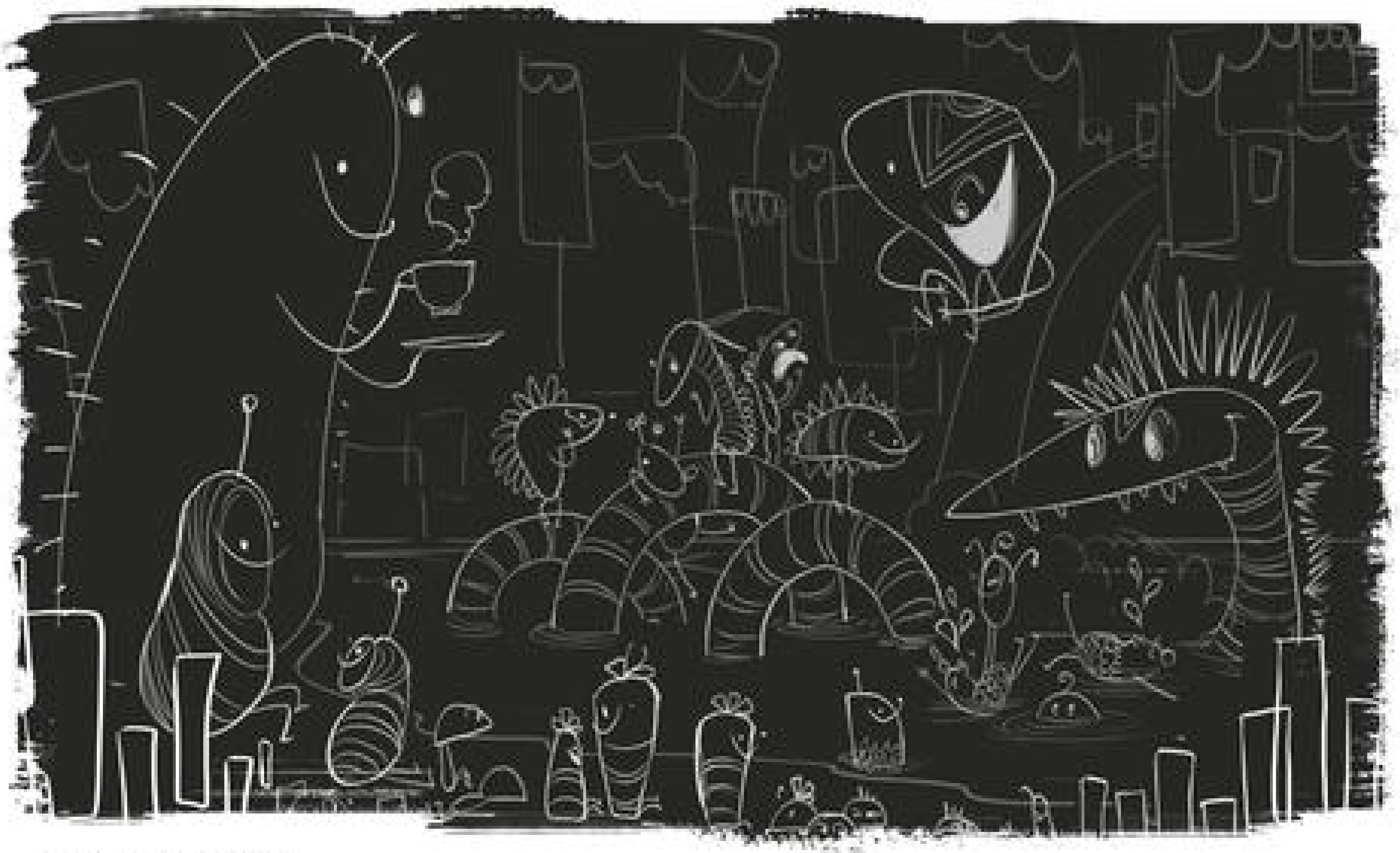
ARTIST *LANCING LOVE CHEN*



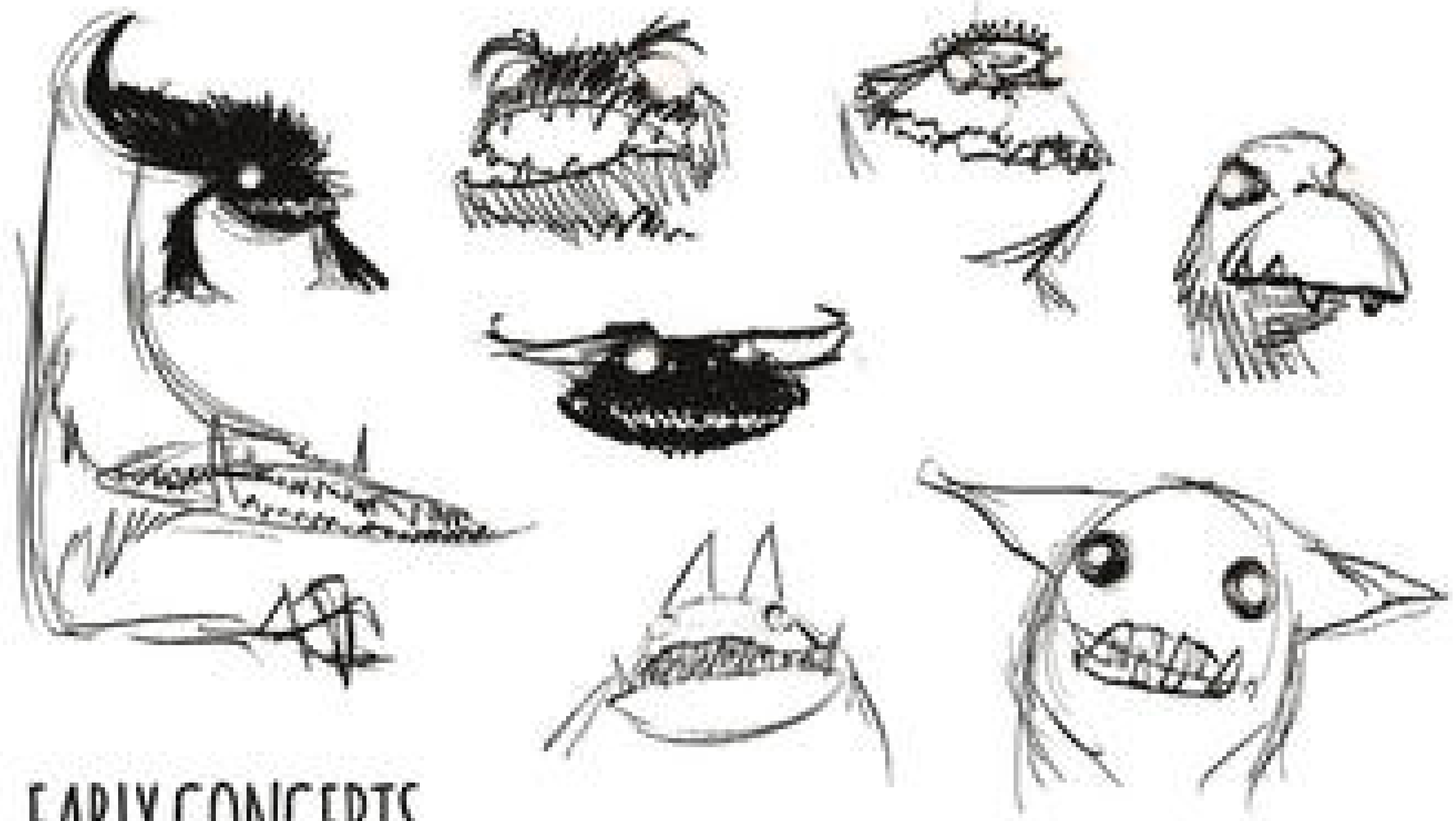
ARTIST *BECKY ROBERTS*

DARK GENIES

Early on in the visual development of the Dark Genies, we got excited about the idea of having the Dark Genies be very literally splotches of dark and colored paint, but they ultimately couldn't deliver on the gameplay ideas that were forming at the time. We still love the visual impact of these designs though!



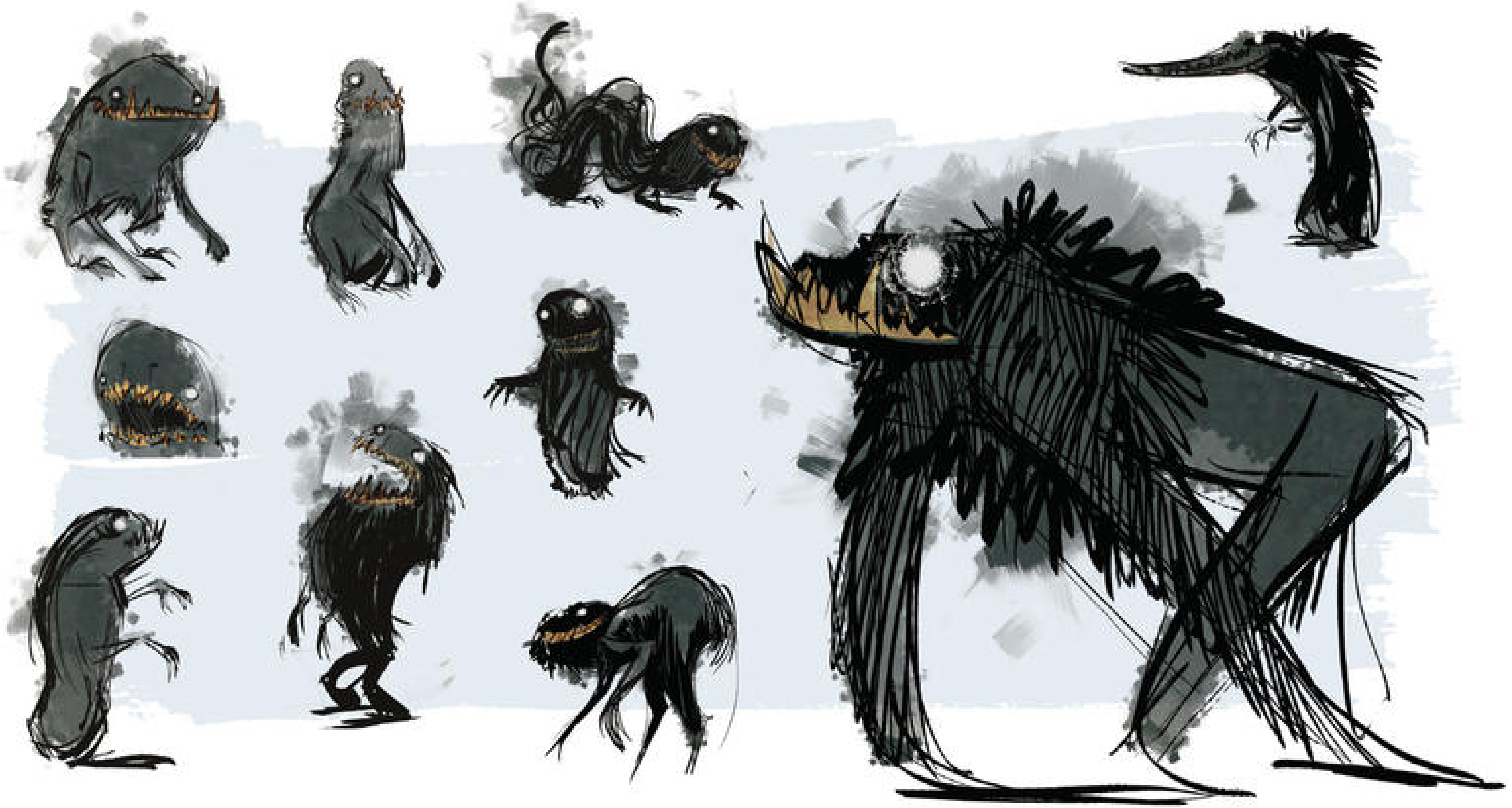
ARTIST *LANCING LOVE CHEN*

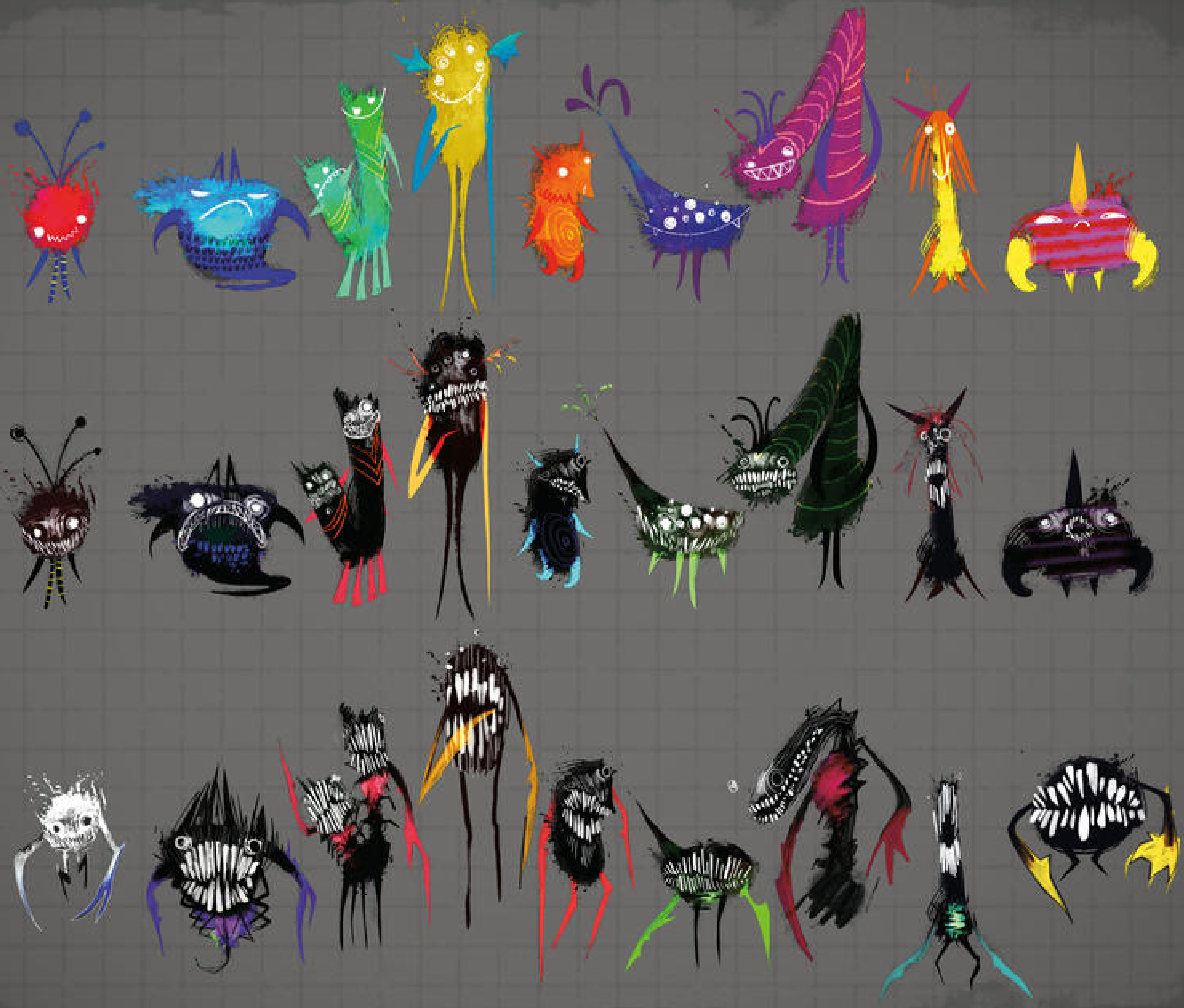


EARLY CONCEPTS

We hadn't yet decided how our Genies would look, so it was wide open (and a lot of fun) in the early days sketching these possessed creatures. Many of the designs were inspired by animal anatomy.

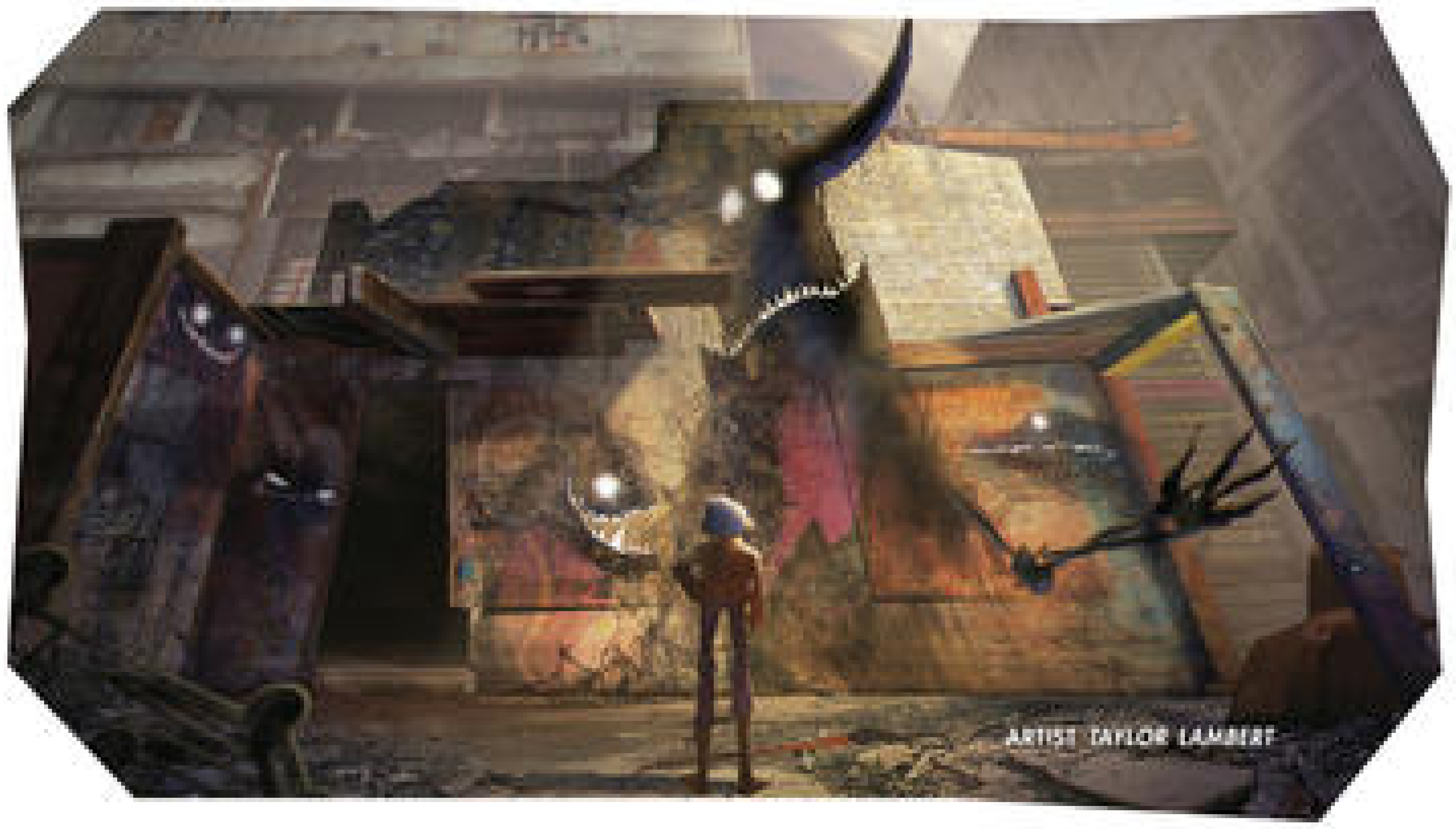
ARTIST *BECKY ROBERTS (BELLOW)*



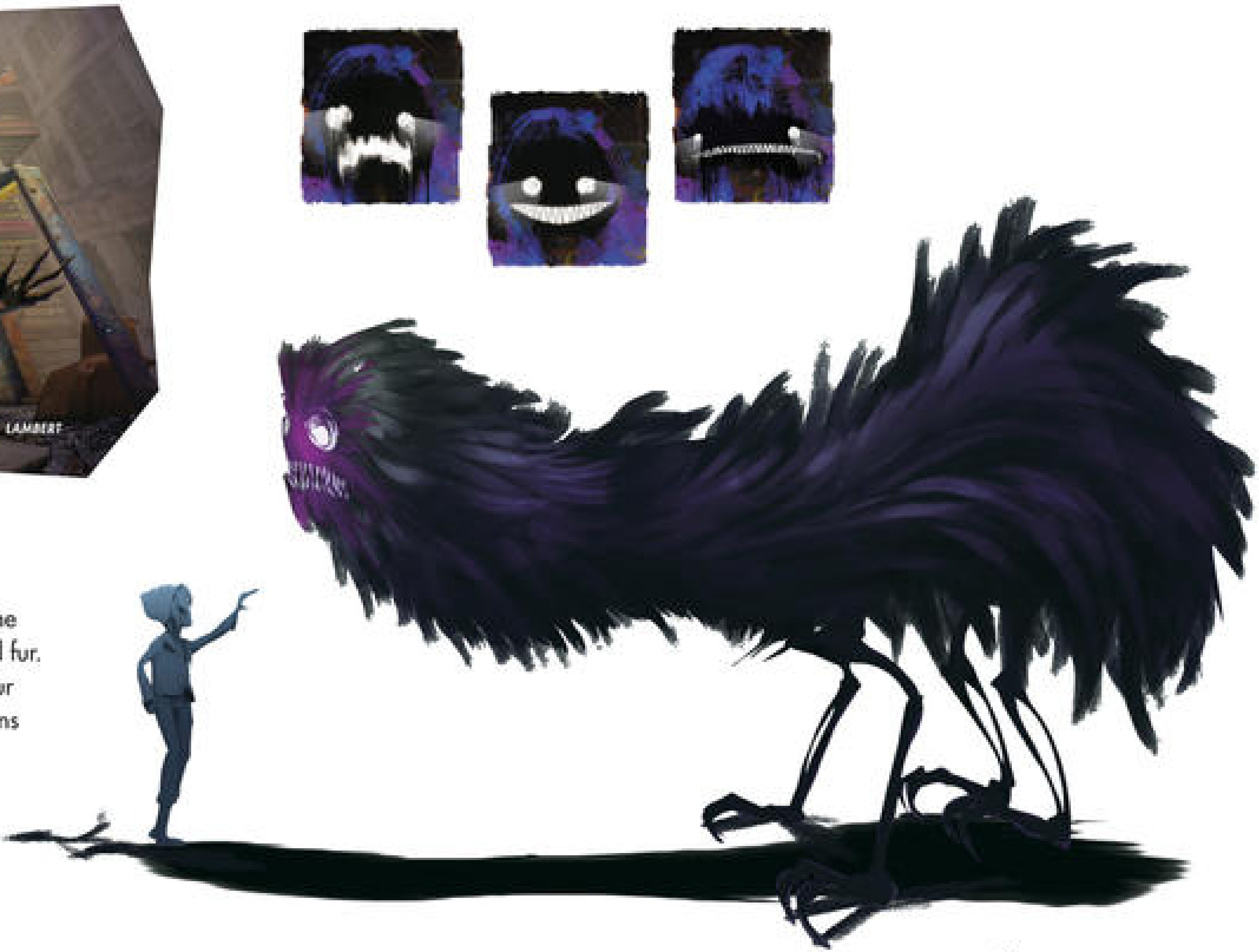


ARTIST *BECKY ROBERTS*

We started to define a simple set of rules for how Genies could transition to Dark Genies and still be recognizable from their old patterns and attachments. We also needed to set a limit for how disturbing they could get.



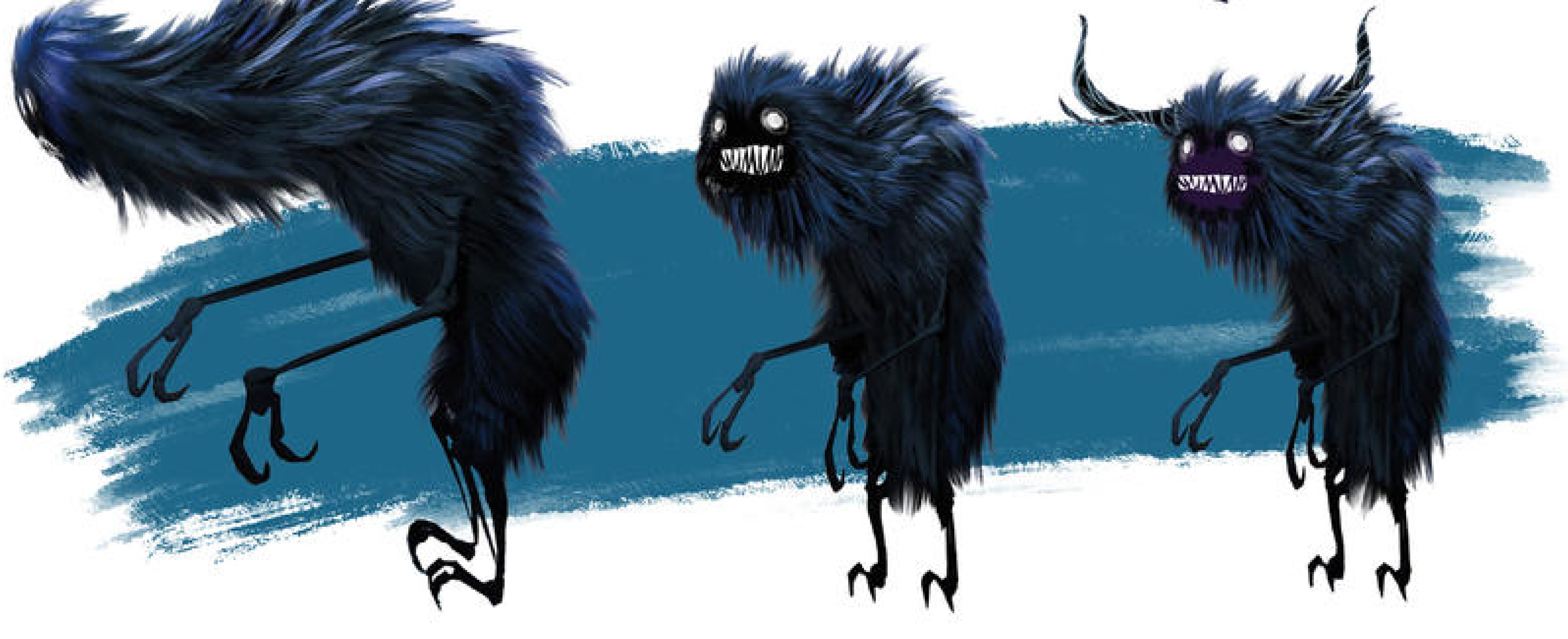
ARTIST TAYLOR LAMBERT

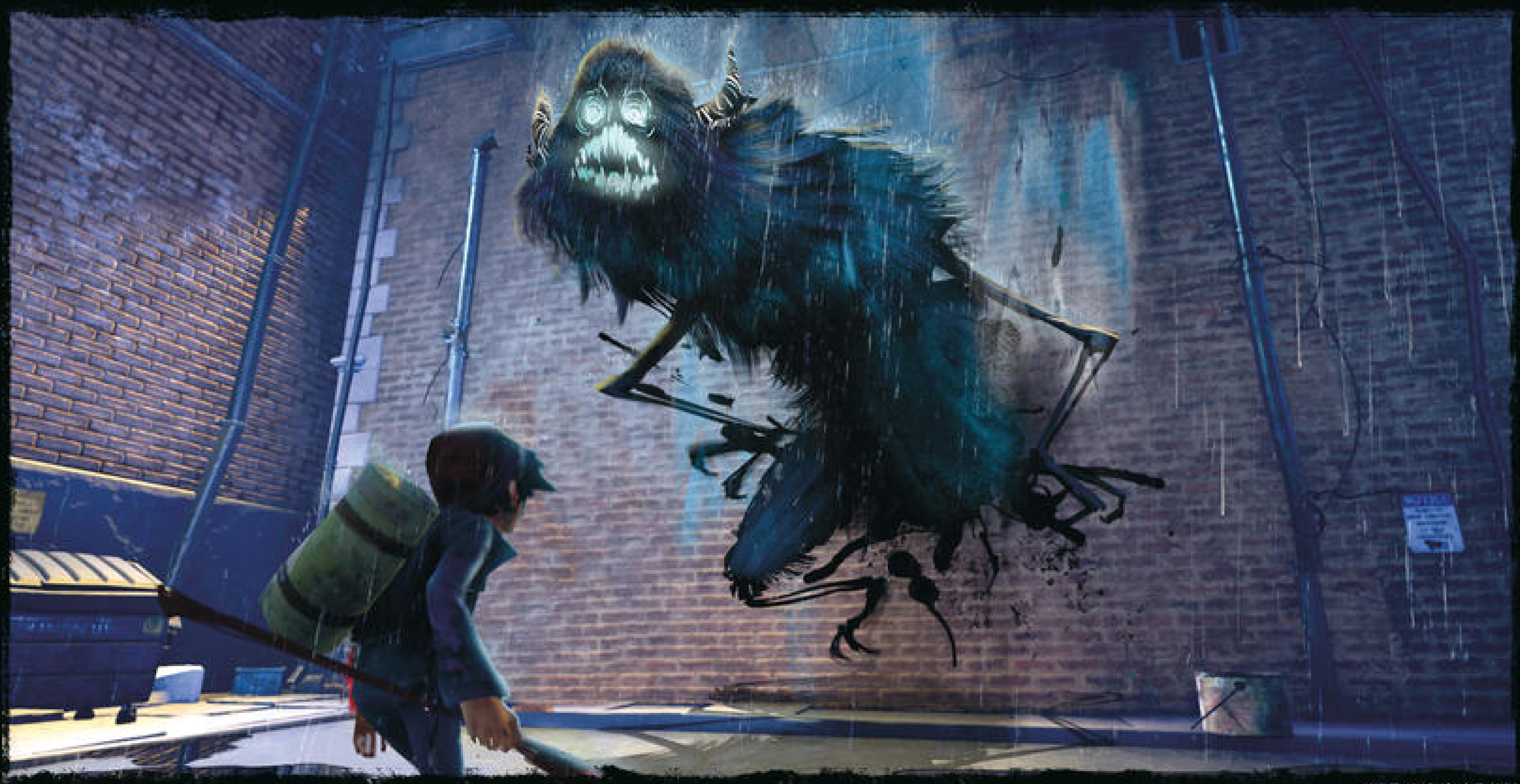


FINAL CONCEPTS

The final designs for the Dark Genies really clicked when the skeletal forms were clearly visible underneath the darkened fur. We also were able to build the technology to transform your 2D attachments for the Genies into recognizable 3D versions on the Dark Genies.

ARTIST JEFF SANGALLI (THIS PAGE)

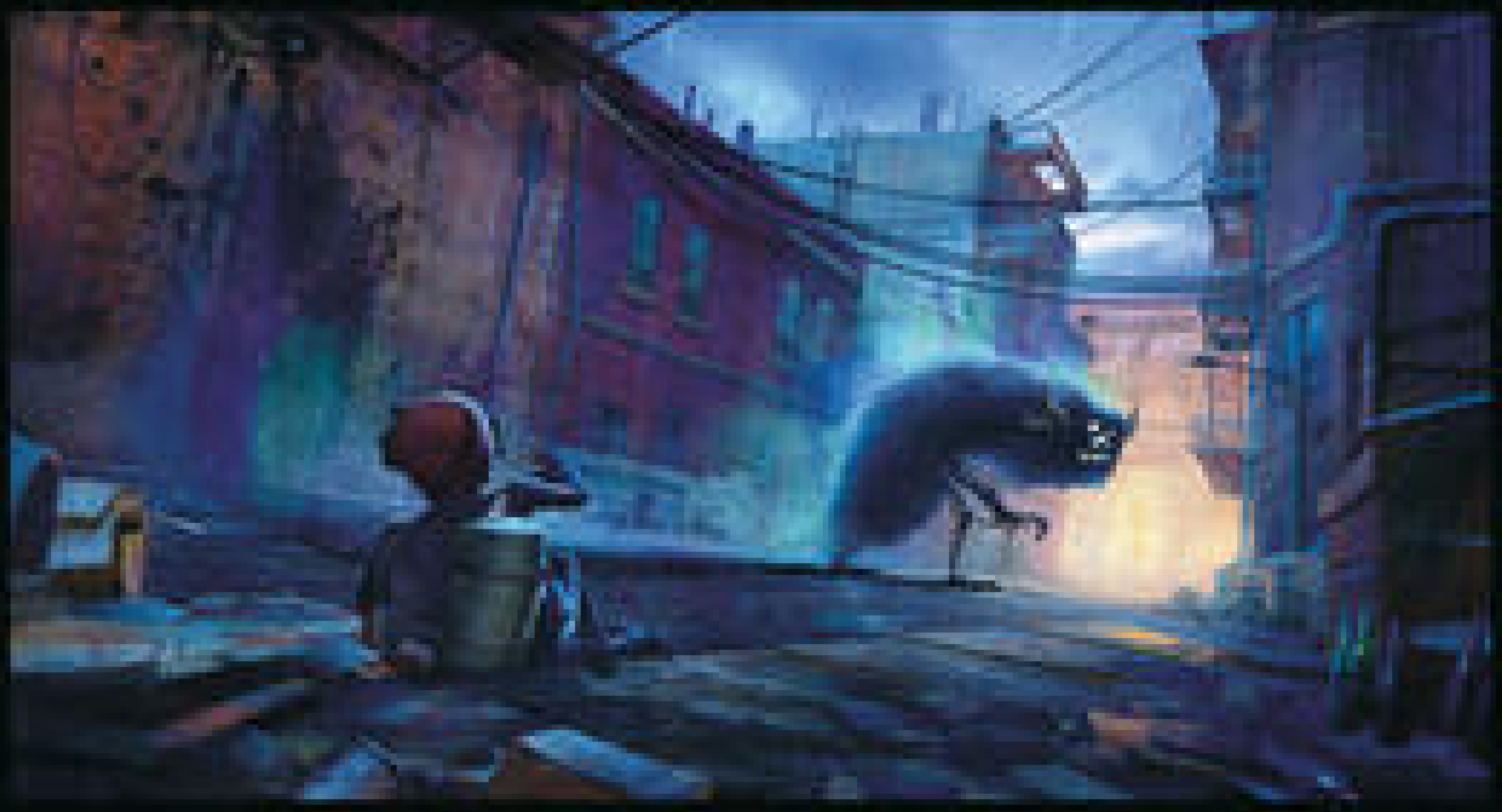




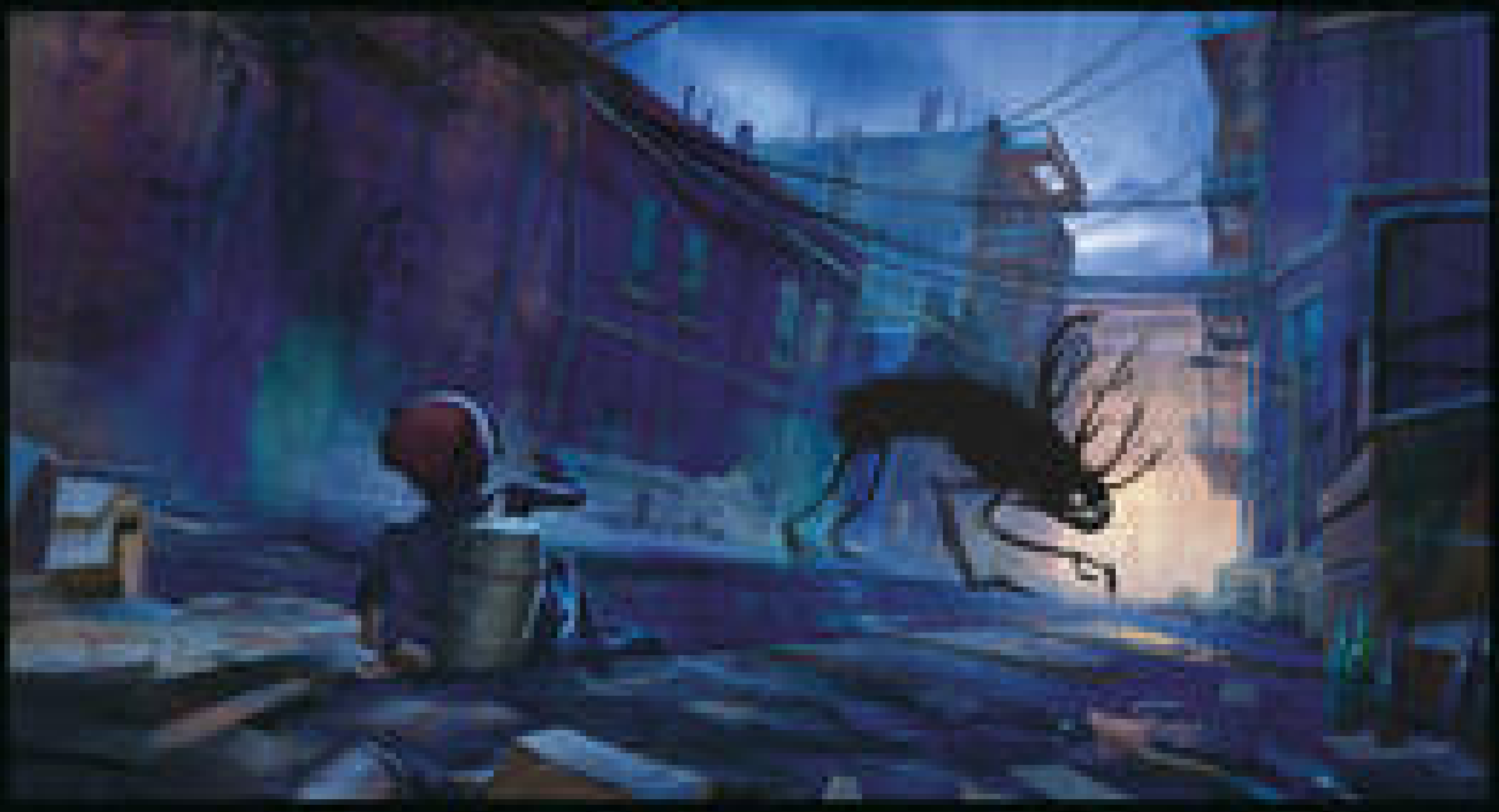
ARTIST LANCING LOVE CHEN

STORYBOARD

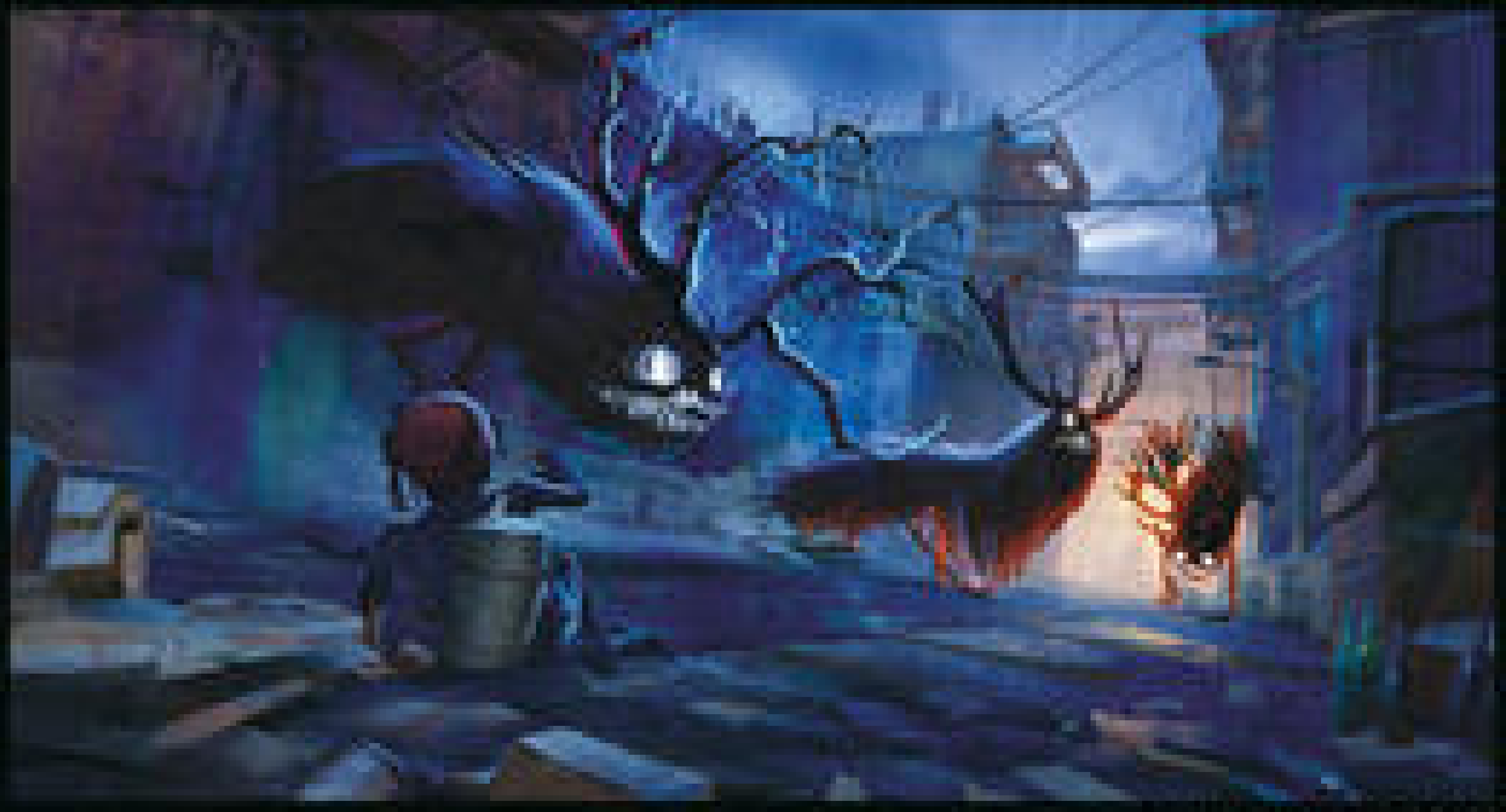
It was important to illustrate the pivotal scene when the Dark Genie emerges from the wall. We had to make sure it communicated. This is a horrifying and personal moment for Ash, so it had to have a haunting quality. We also had to show that the Genies behaved more like animals in this form. We did many different iterations of boards and animatics trying to get this scene right.



ARTIST TAYLOR LAMBERT



ARTIST BECKY ROBERTS



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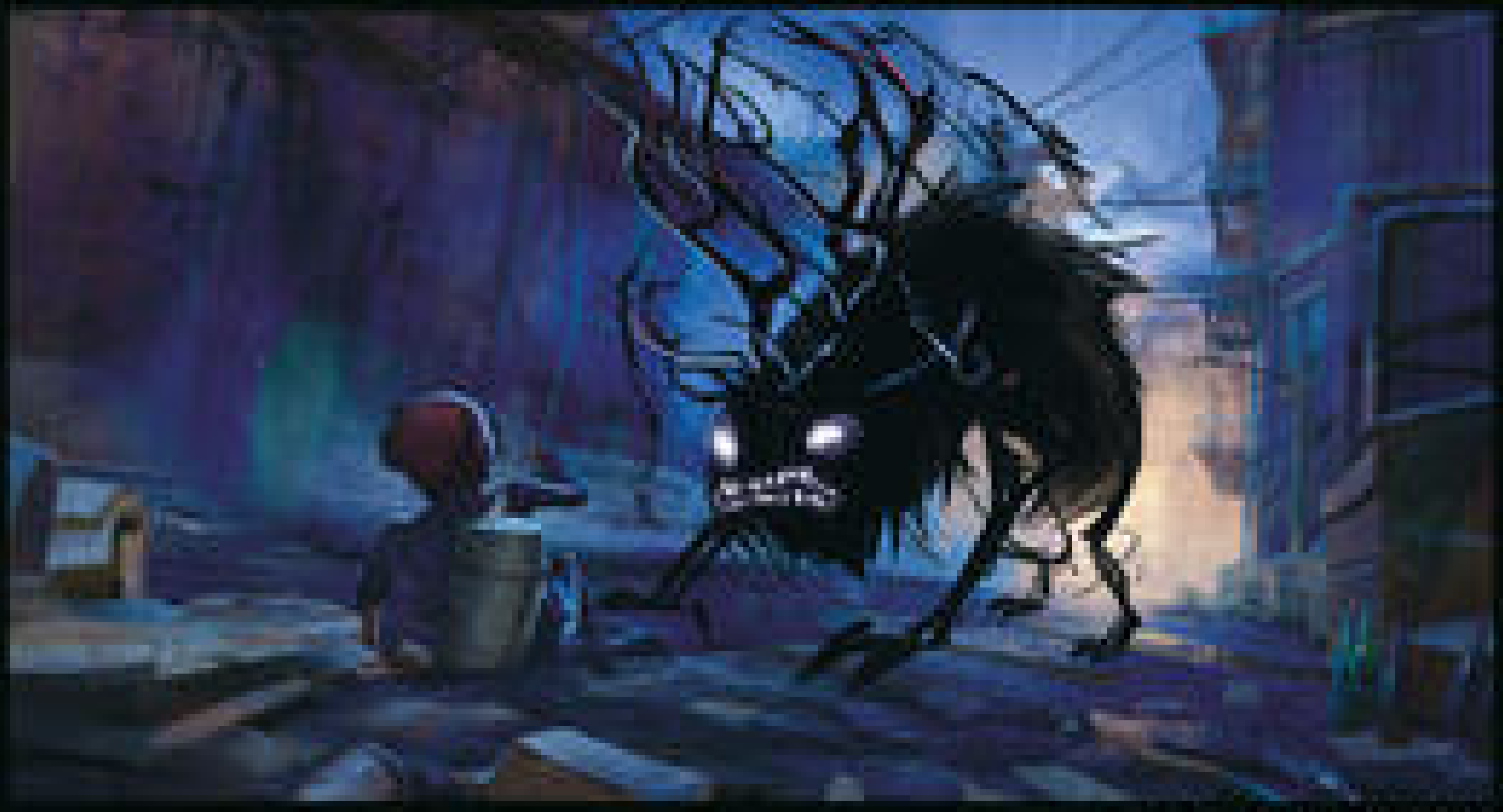

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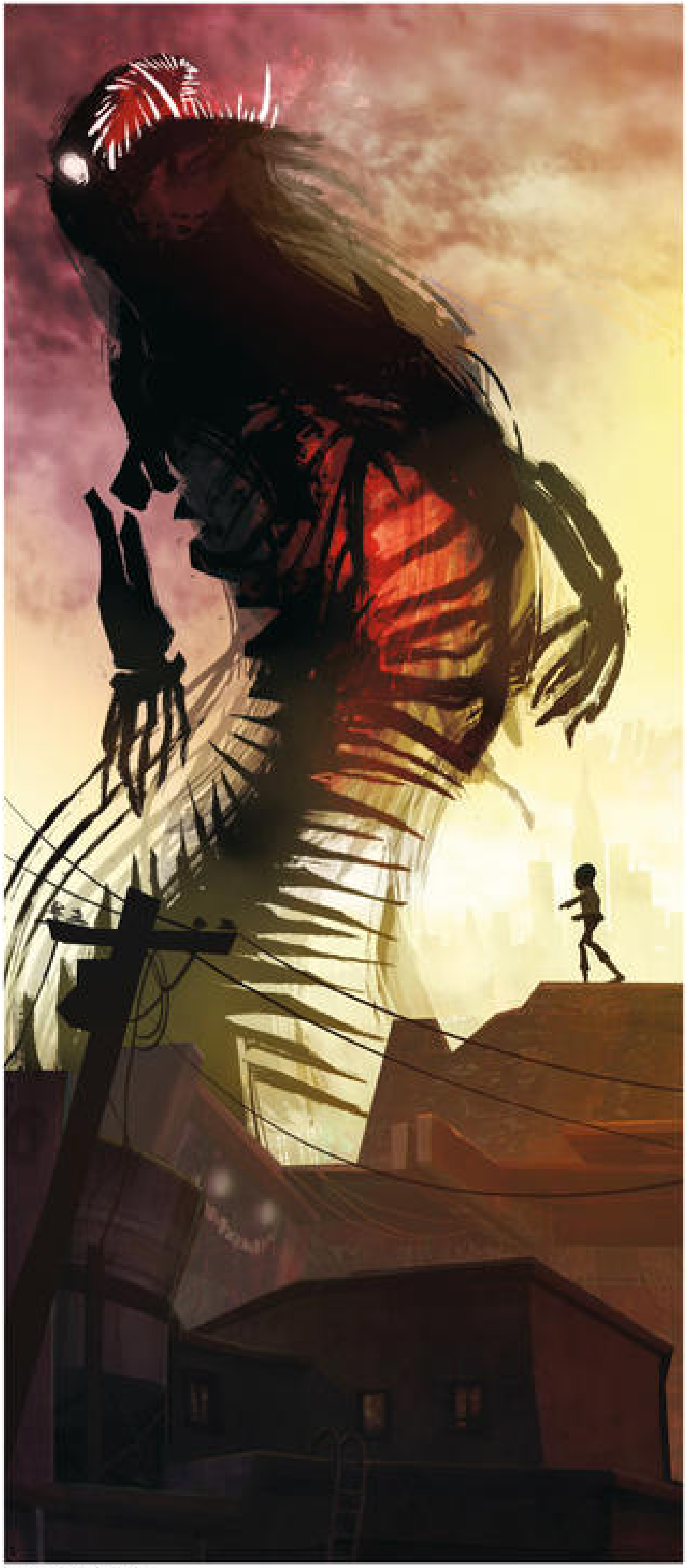
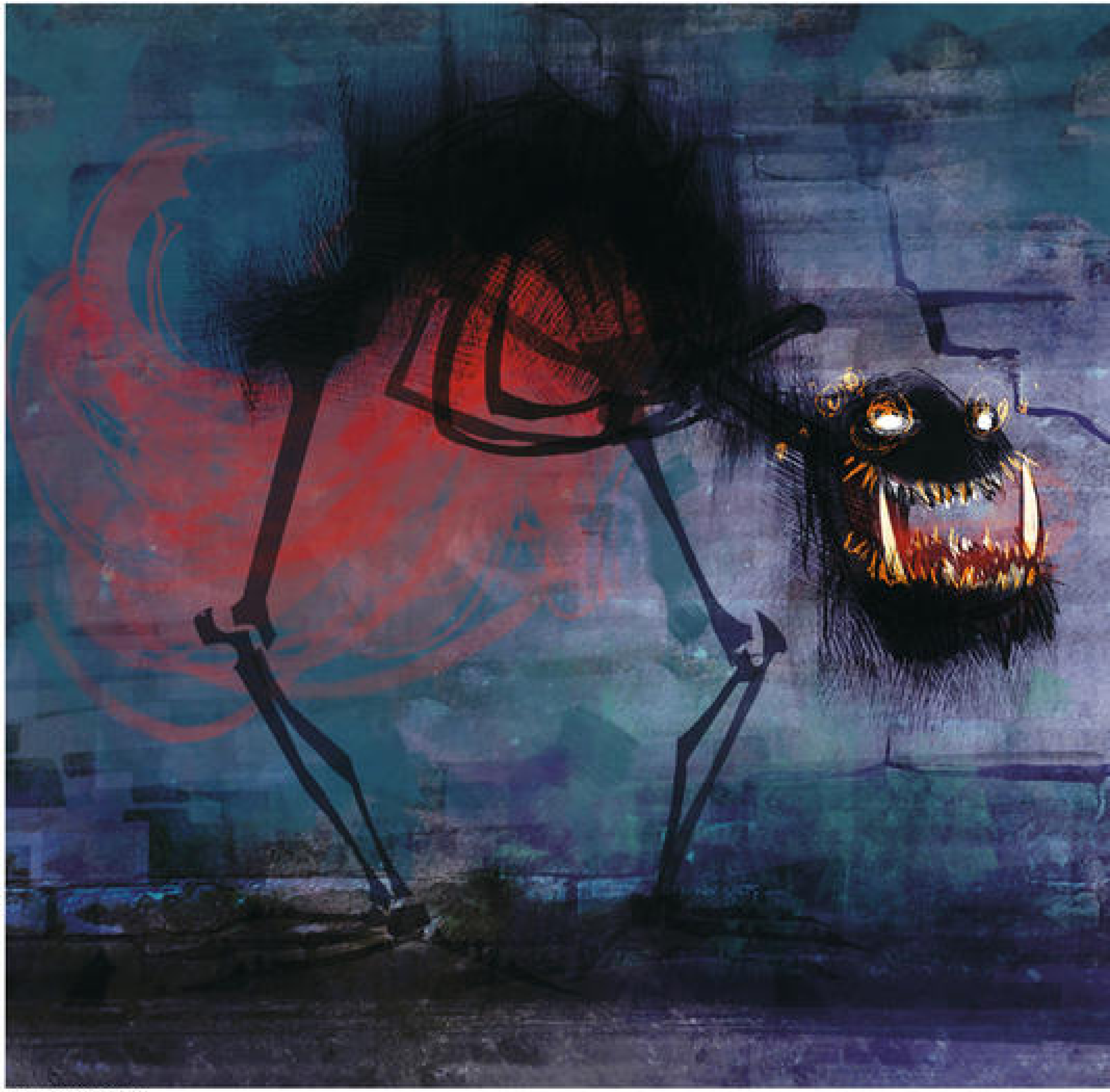


ARTIST *BECKY ROBERTS*



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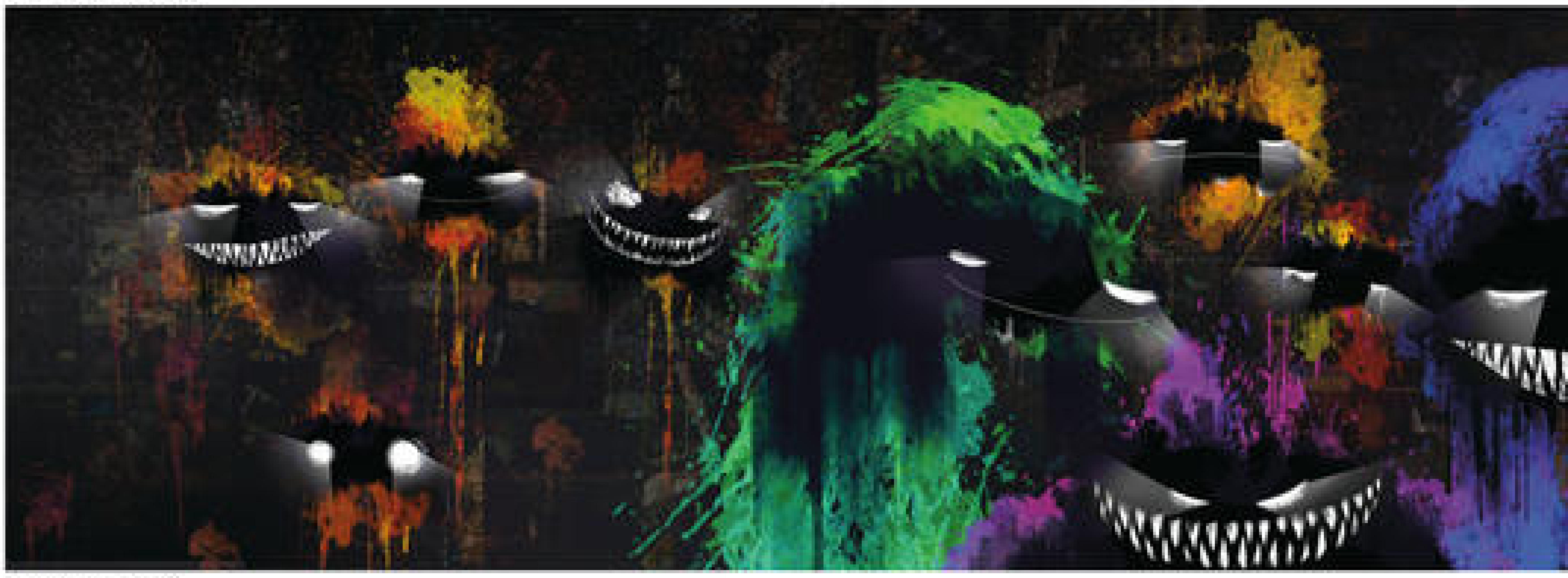
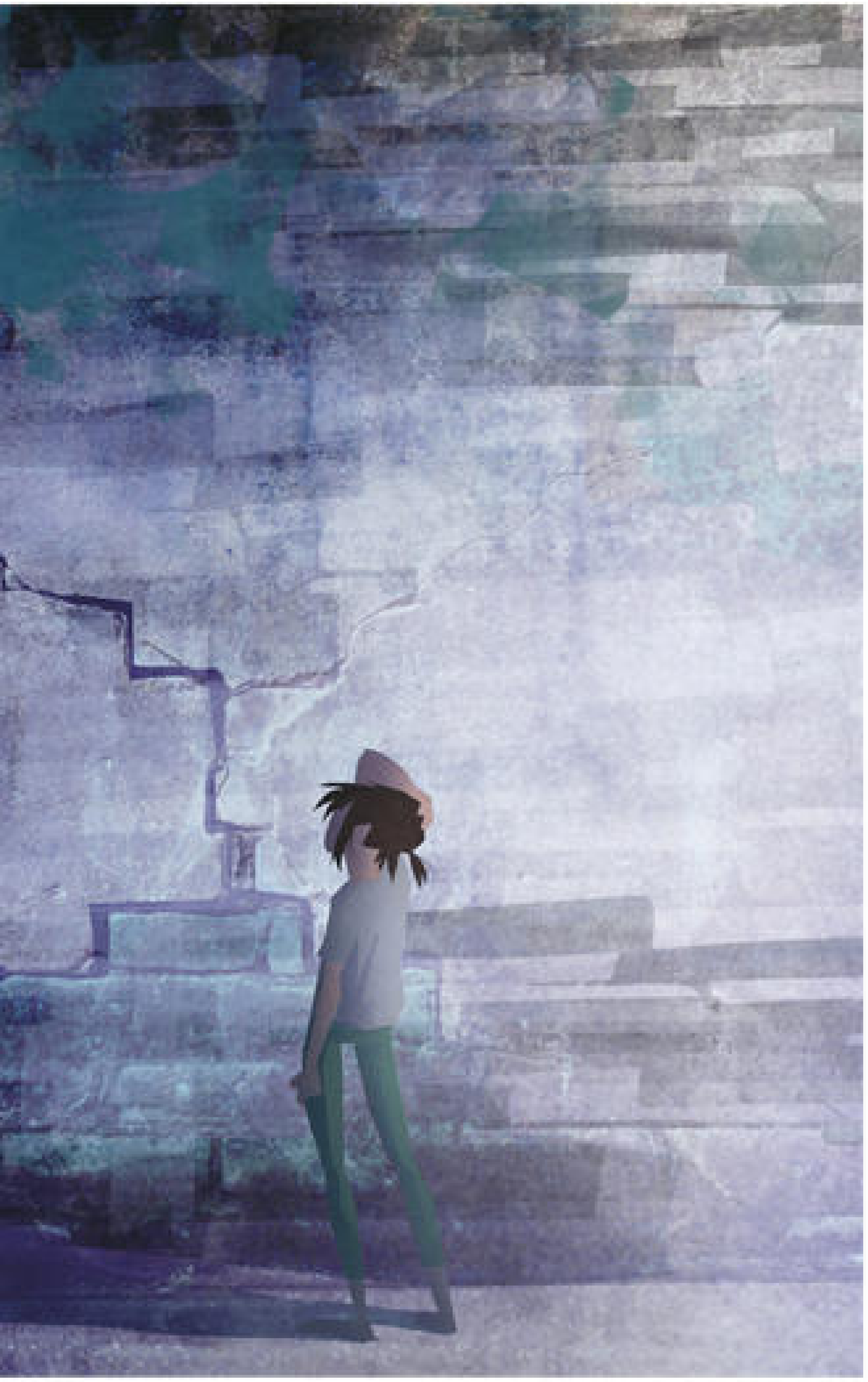
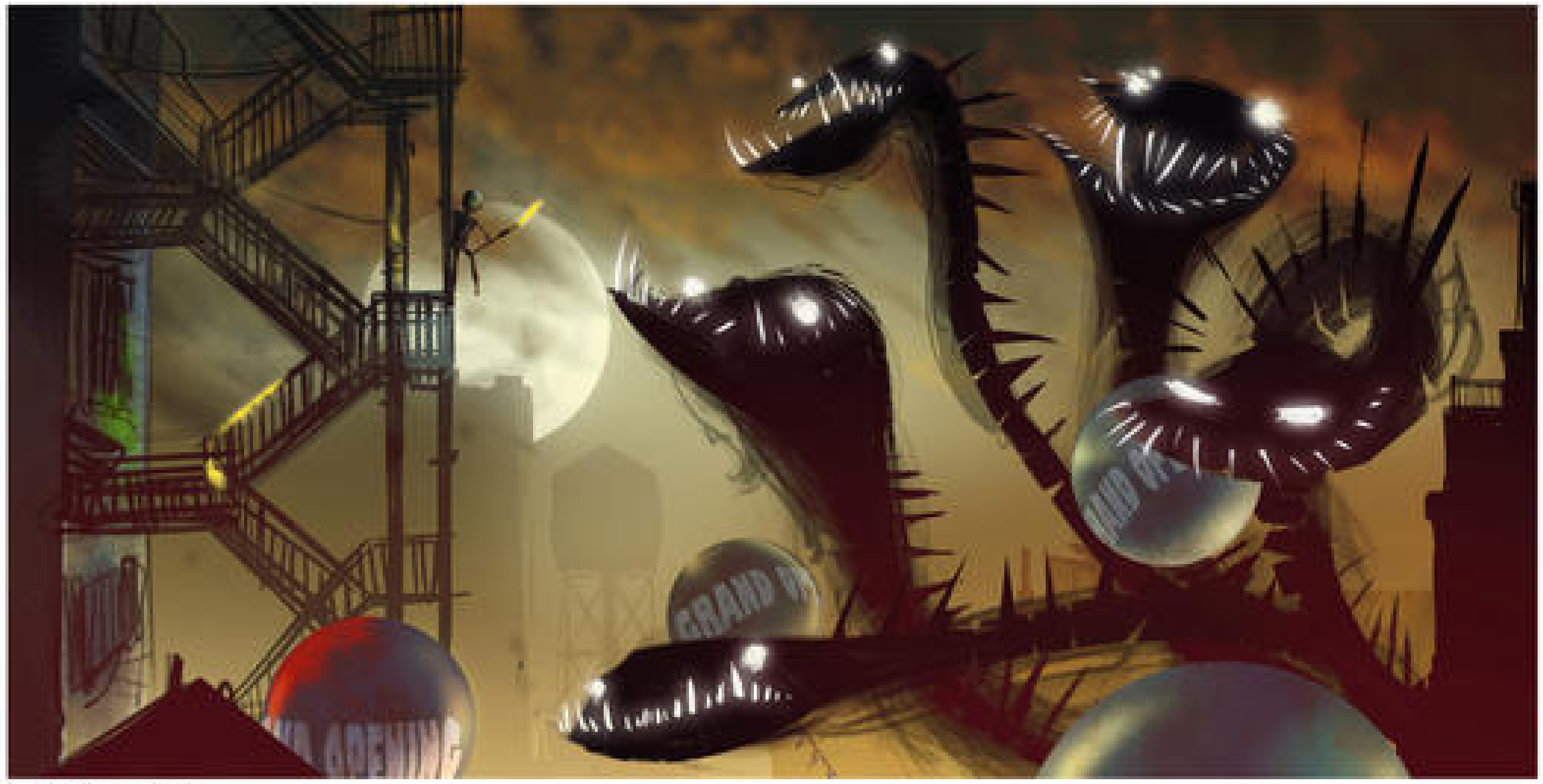
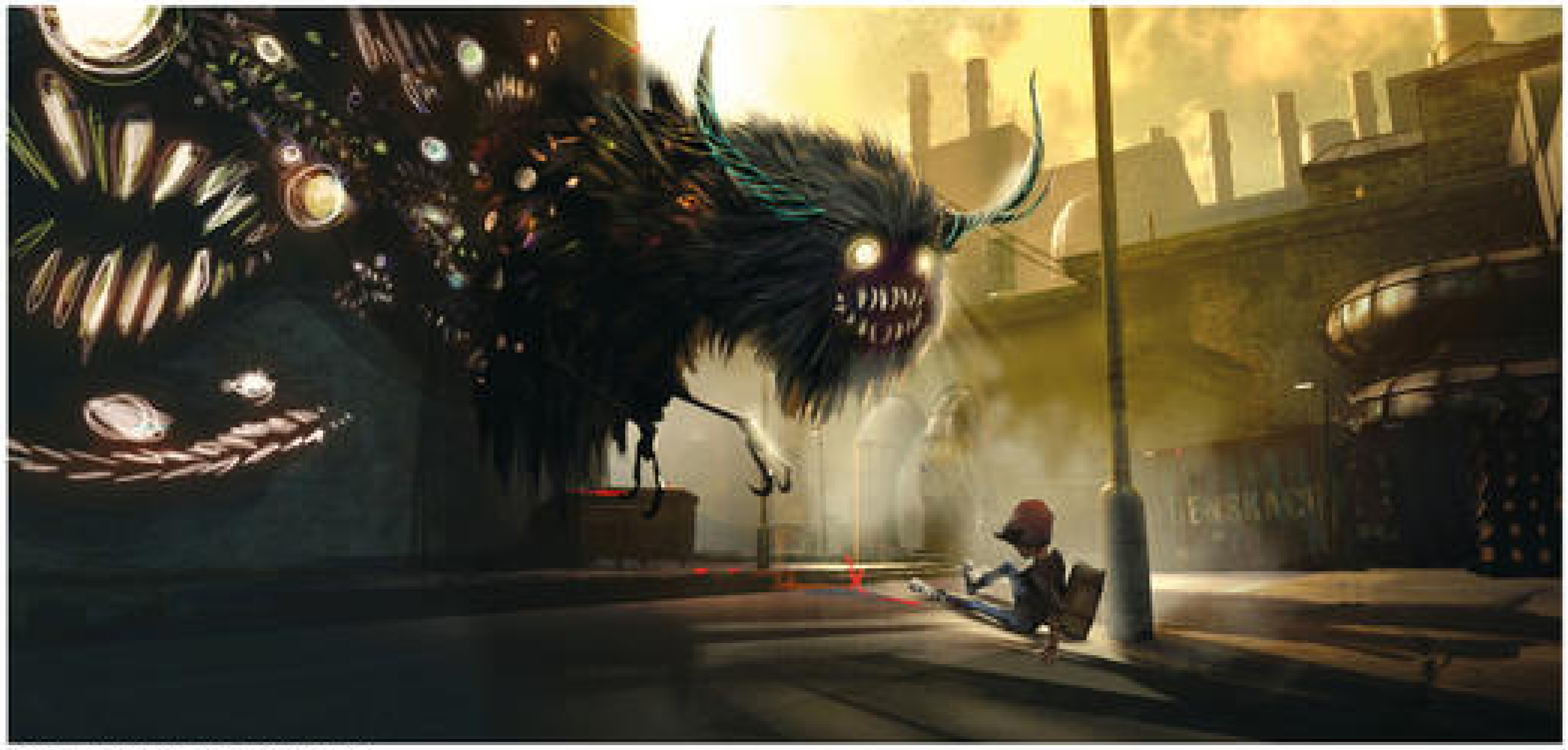


ARTIST *JEFF SANGALLI*

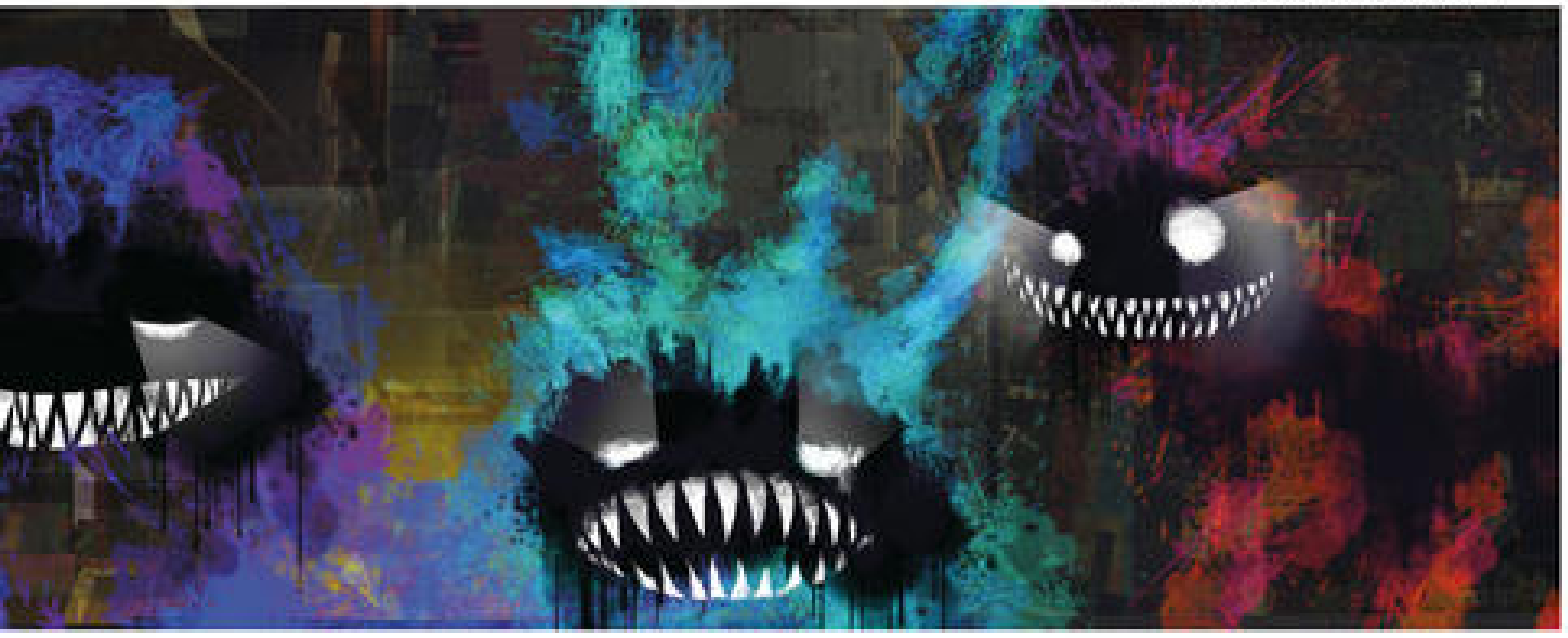




ARTIST BECKY ROBERTS

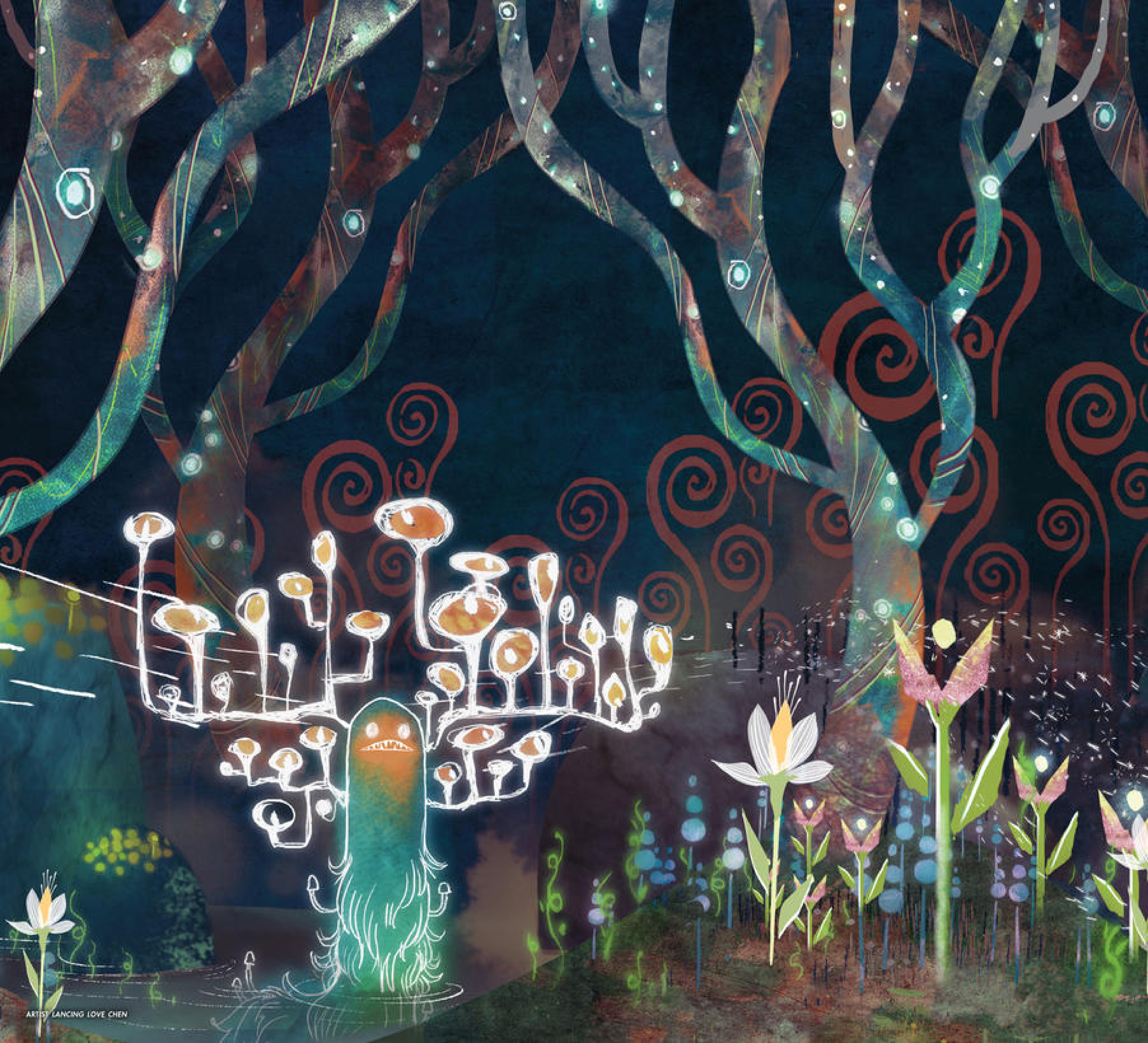


ARTIST JEFF SANGALLI AND BECKY ROBERTS

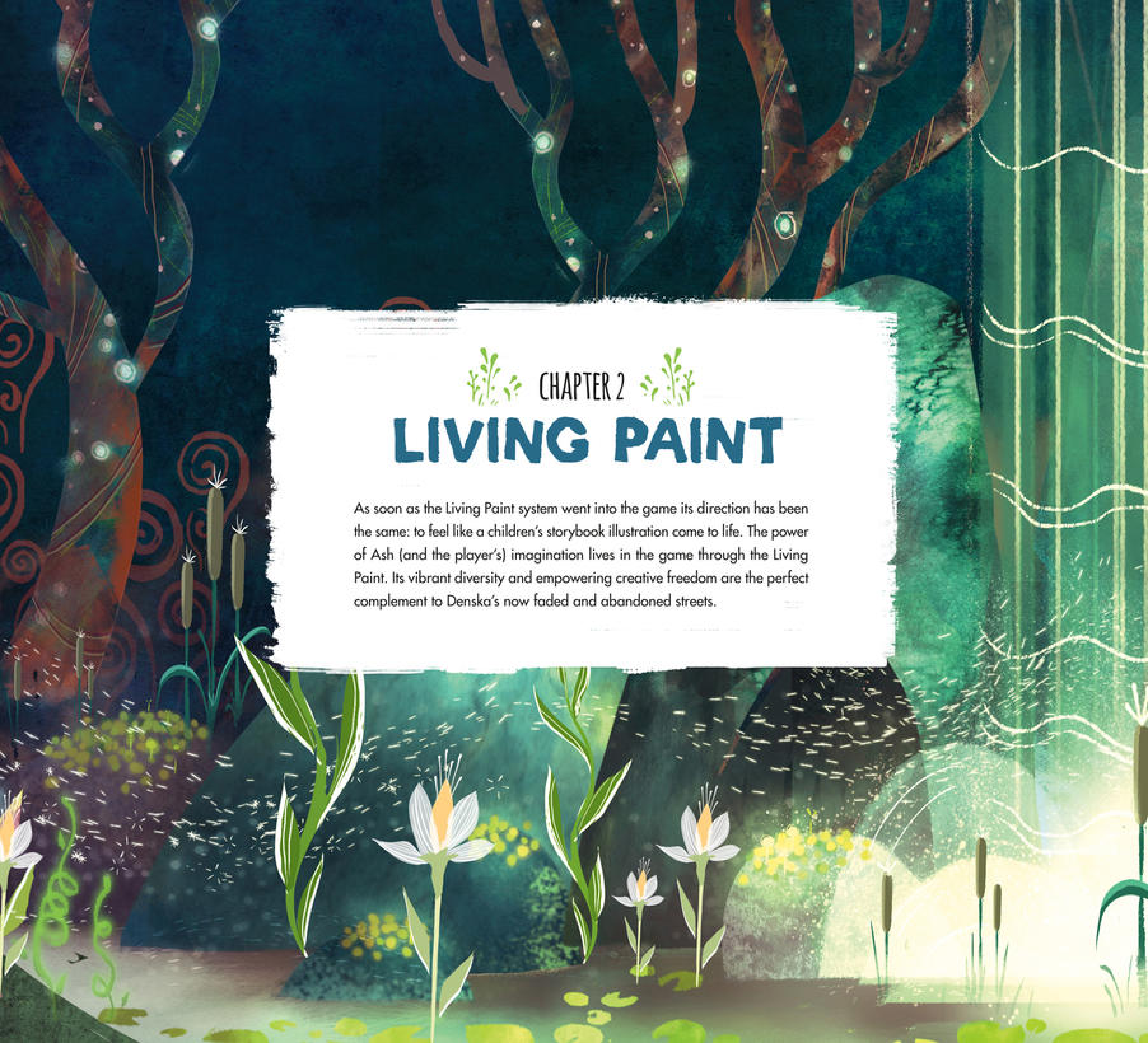


CONCEPT ART

Some elements kept returning to our concepts. One surviving feature was the hollow white eyes, which were so versatile and could be both scary and appealing. Creepy skeletal arms and claws also stayed, but we didn't keep the jagged spine or hollow glowing chest—the imagery became too gruesome for the budding story. In the end we also scaled the Dark Genies to better fit the intimate streets of Denska.



ARTIST: LANCING LOVE CHEN



CHAPTER 2

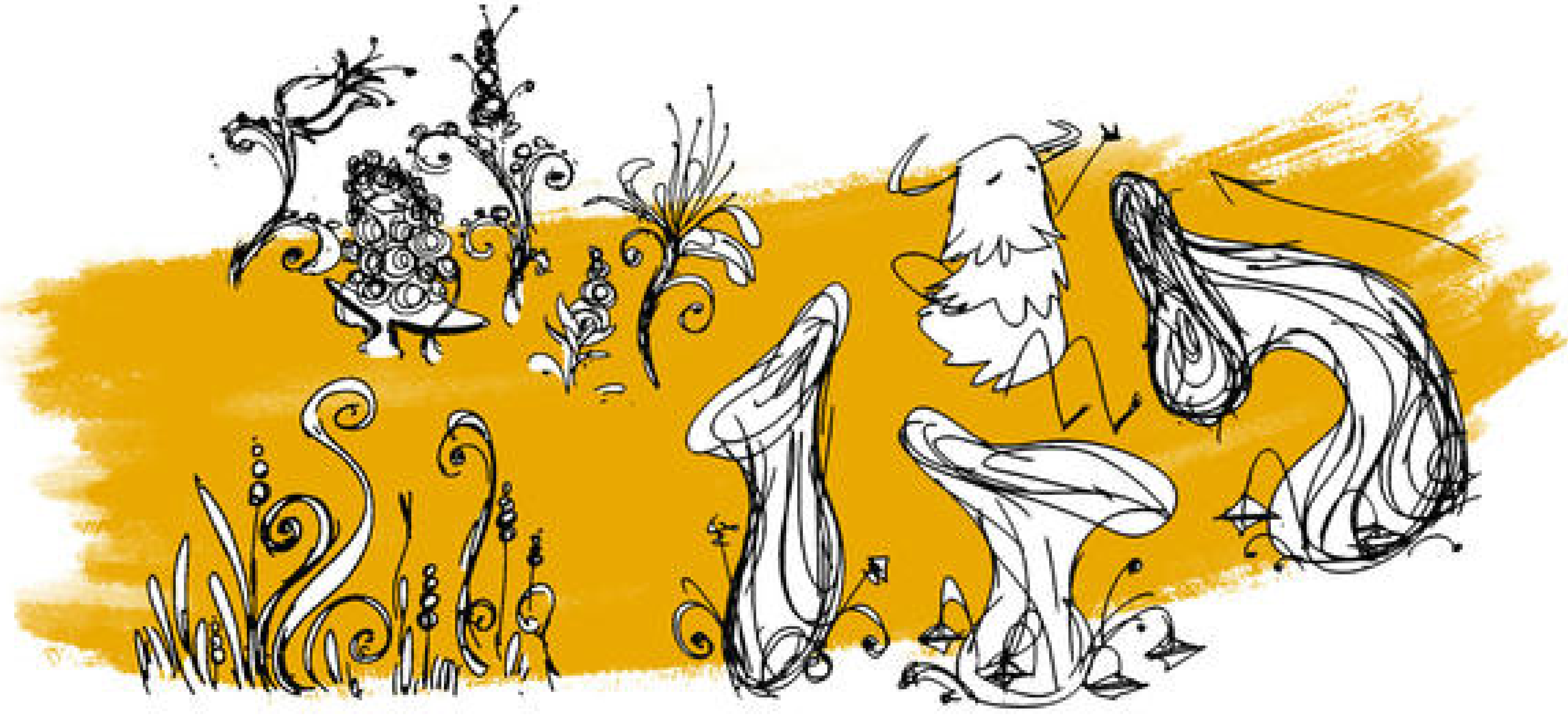
LIVING PAINT

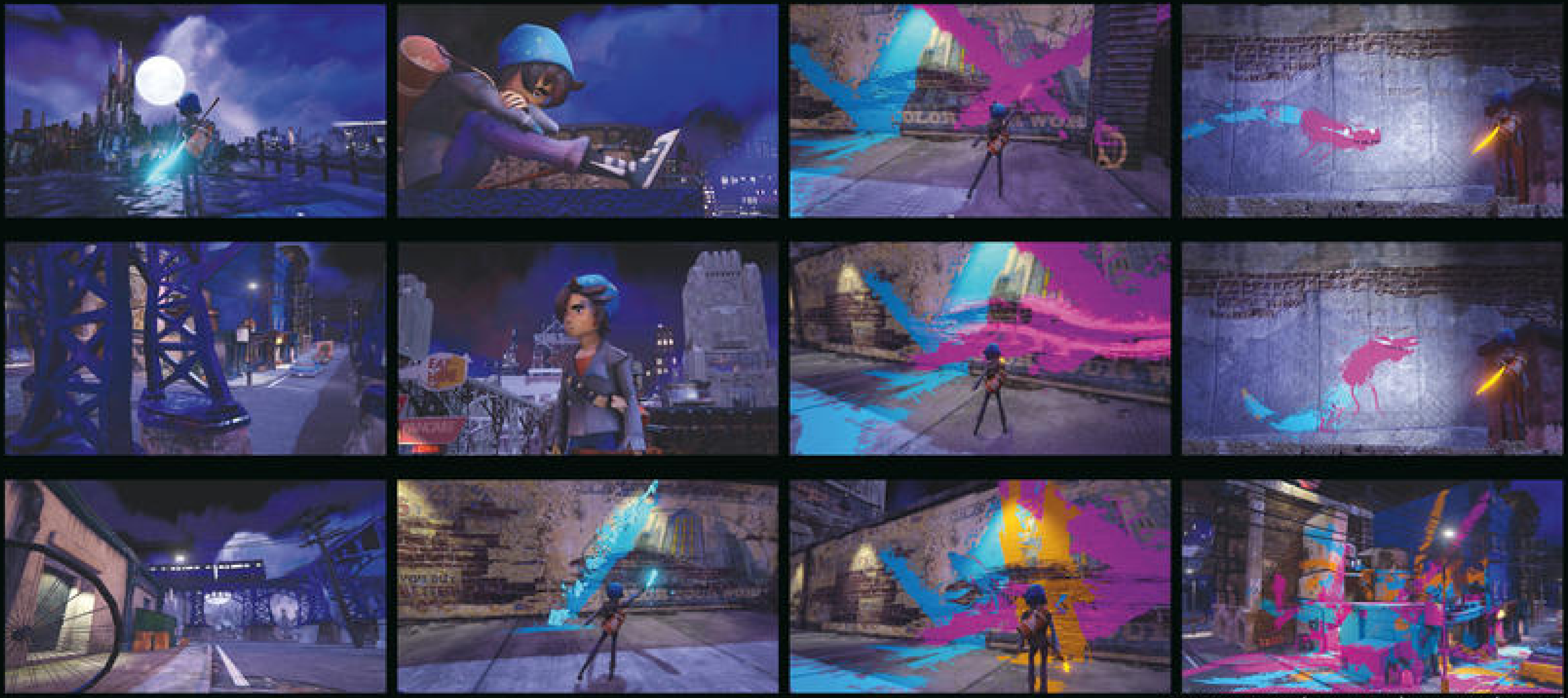
As soon as the Living Paint system went into the game its direction has been the same: to feel like a children's storybook illustration come to life. The power of Ash (and the player's) imagination lives in the game through the Living Paint. Its vibrant diversity and empowering creative freedom are the perfect complement to Denska's now faded and abandoned streets.

EARLY STAGES

Along with designing the Living Paint world as a set, we also had to think of how these designs would behave separately as gameplay assets. The possibilities became endless at this point, as there were many different ways to "paint" something. Since every design was based in nature, we played around with flourishes and blooms and different drawing inputs.

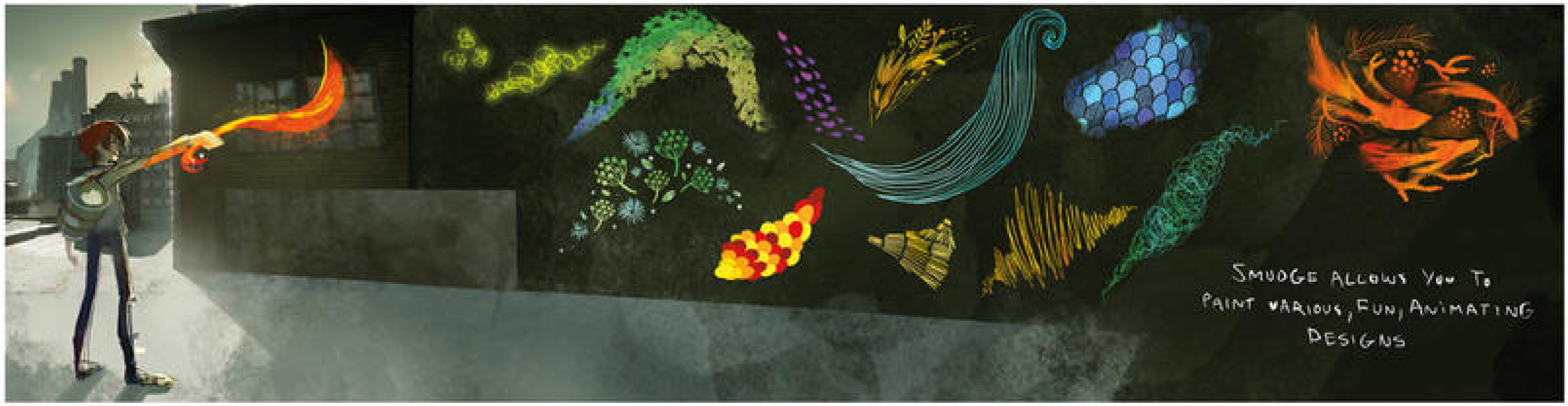
ARTIST *LANCING LOVE CHEN* (RIGHT)



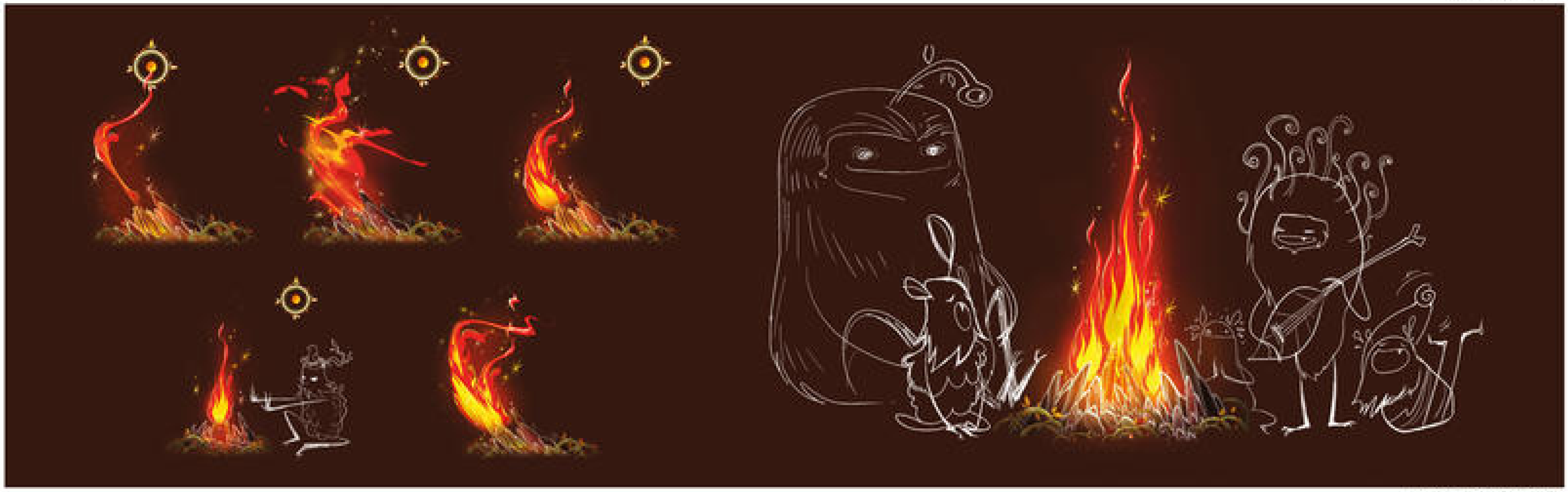


ARTISTS *HAEWON NAM* (PROTOTYPE LEVEL), *NICK MAKSIM* (CHARACTER)

This was our first in-engine prototype and was as much about getting to grips with Unreal Engine 4 as it was a true visual test. It shows an early step towards the level of stylization we were after in our world (we dialed it down after this) but it locked our stop motion aesthetic, particularly with the characters. Future iterations on the world carried this handcrafted pillar further into the environment.


SMUDGE ALLOWS YOU TO PAINT VARIOUS, FUN, ANIMATING DESIGNS

ARTIST LUCIE ROBERTS

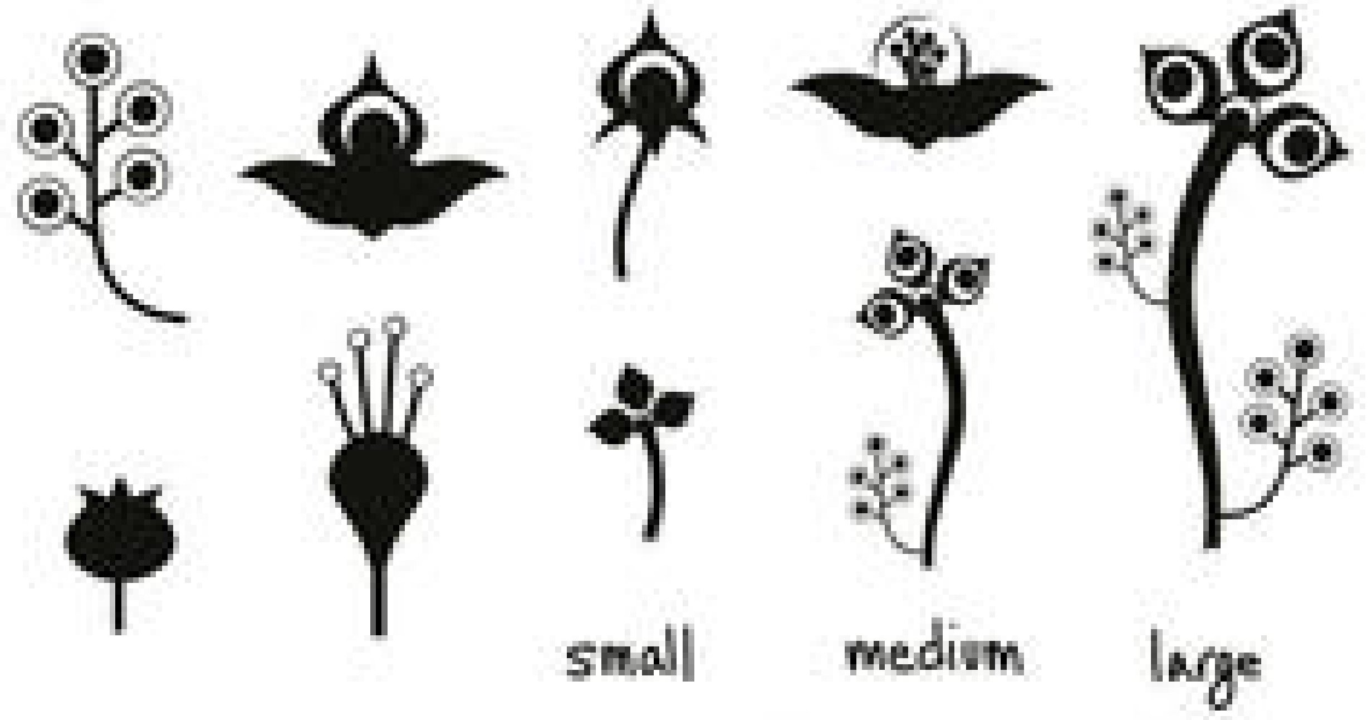


ARTIST LANCING LOVE CHEN

BRUSHES

Previsualization was done for each design to predict how it animated, how it would look and react with other designs, and how a design would behave before or after completion.

ARTIST TAYLOR LAMBERT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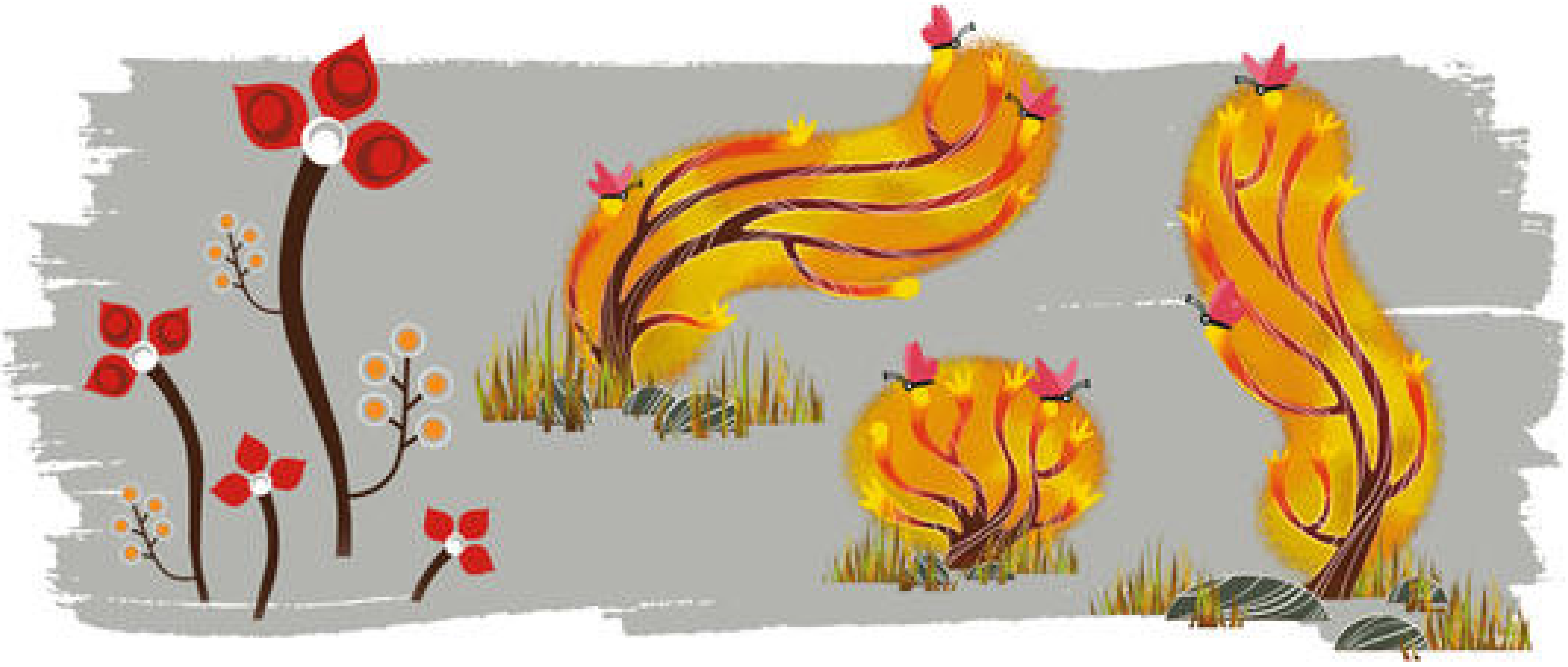
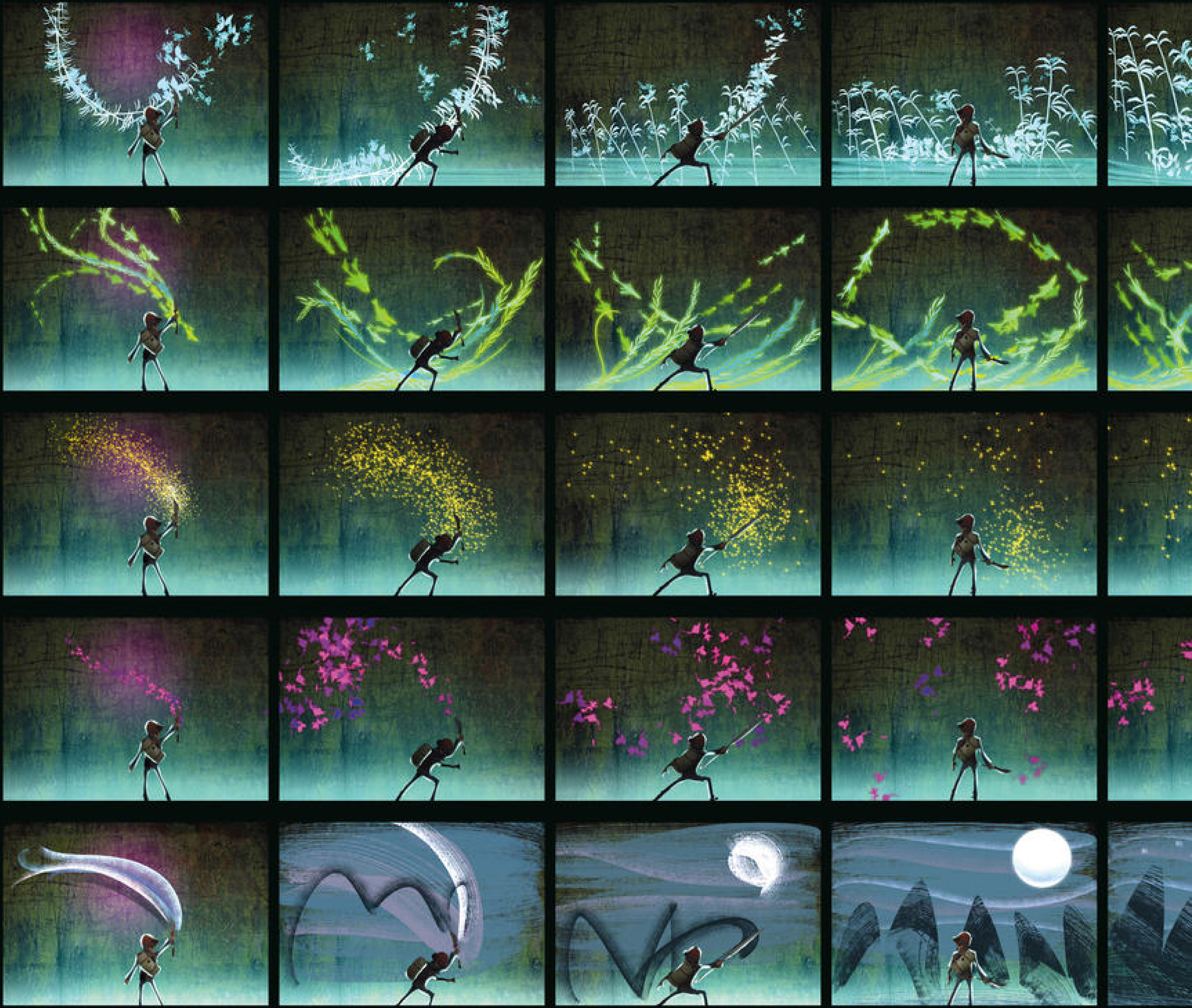
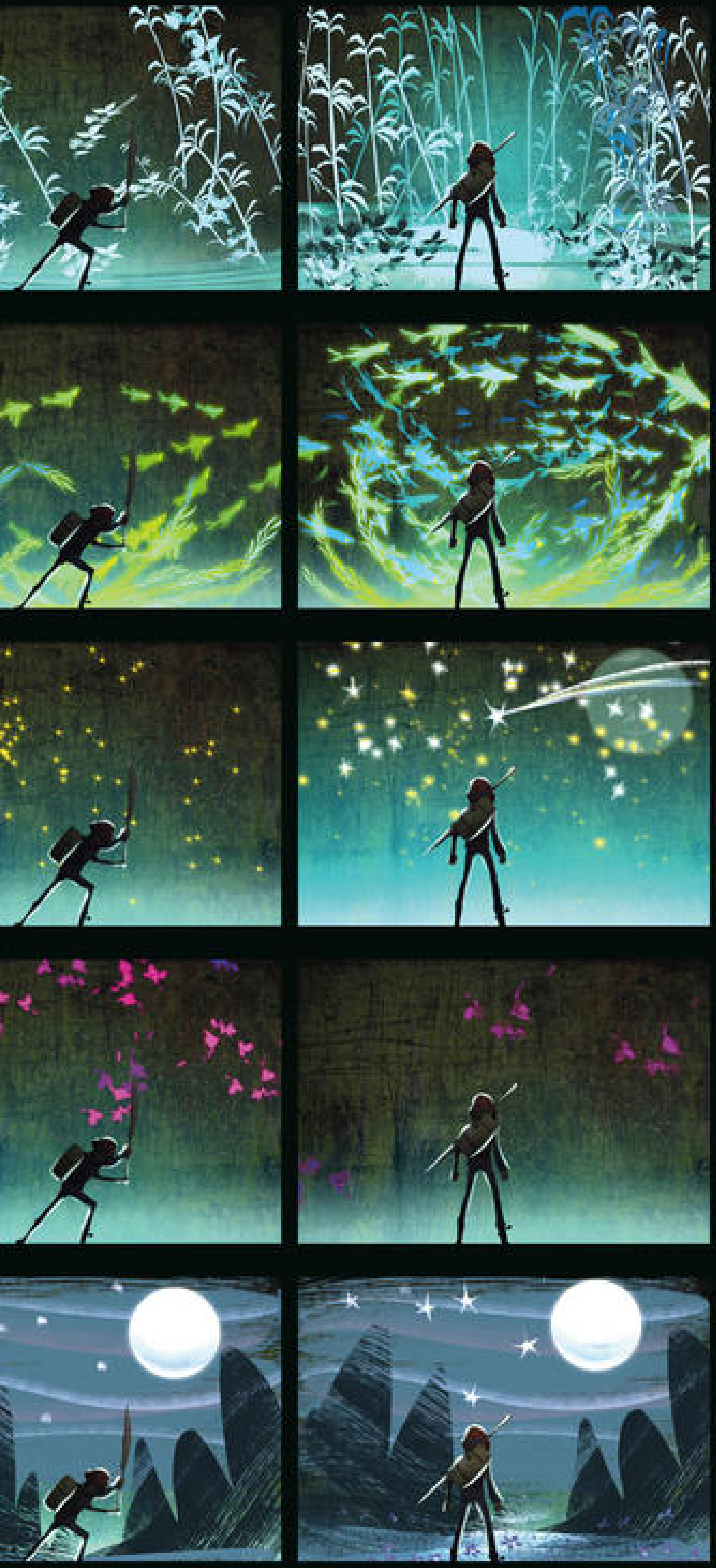






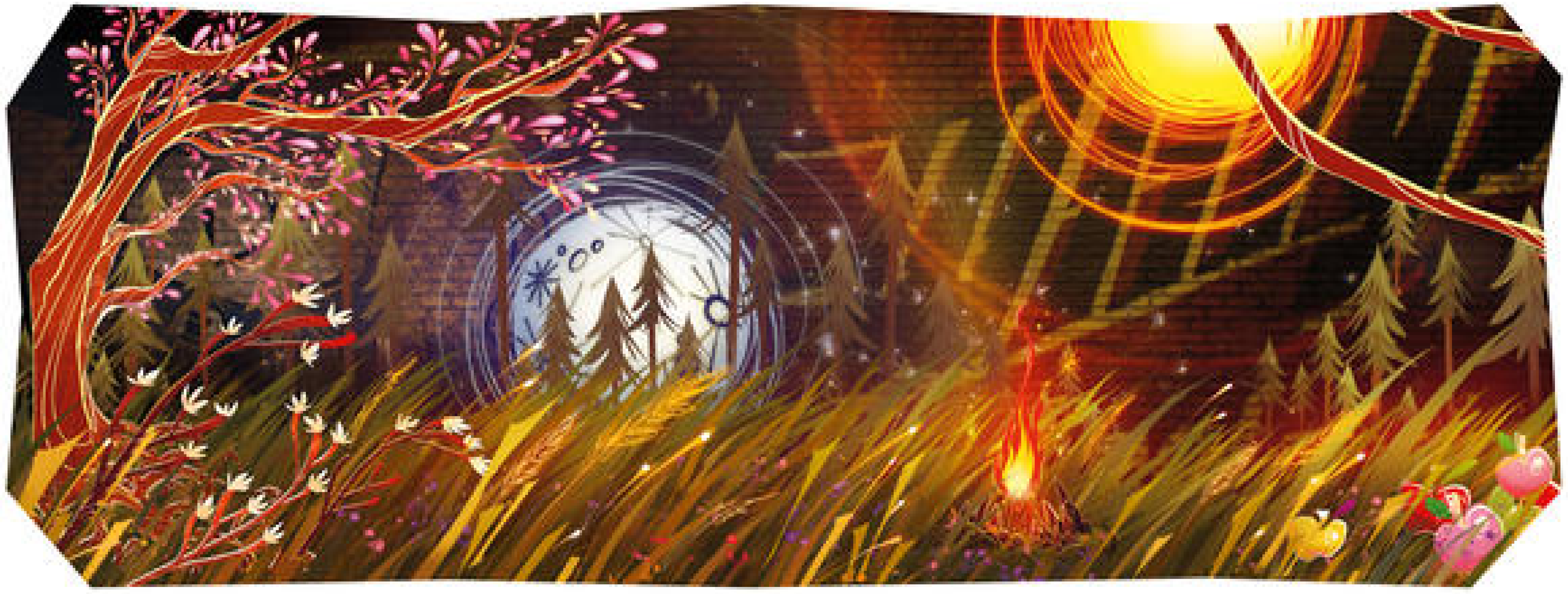
At a pivotal moment in development, we paused and realized we had to rework our painting mechanics. Jeff took on these visual gameplay story boards to try and imagine what it might look like to bring to life strokes that the player might make in the game. This led to two significant moments for the Living Paint mechanics—the first butterfly prototype (pictured above), and also how a world itself might be constructed through player art.

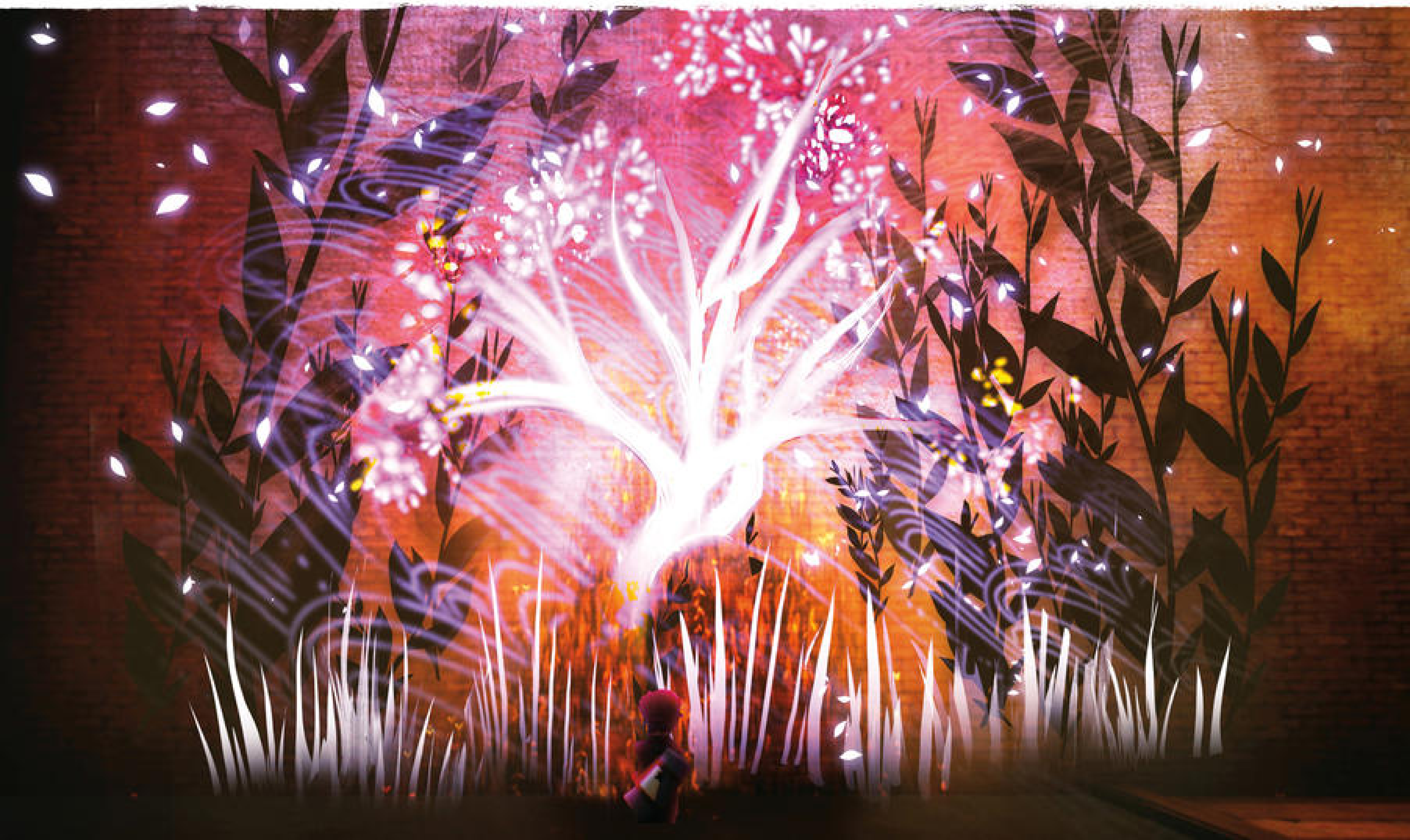
ARTIST JEFF SANGALLI (THIS PAGE AND FACING PAGE)

CHERRY FIELD

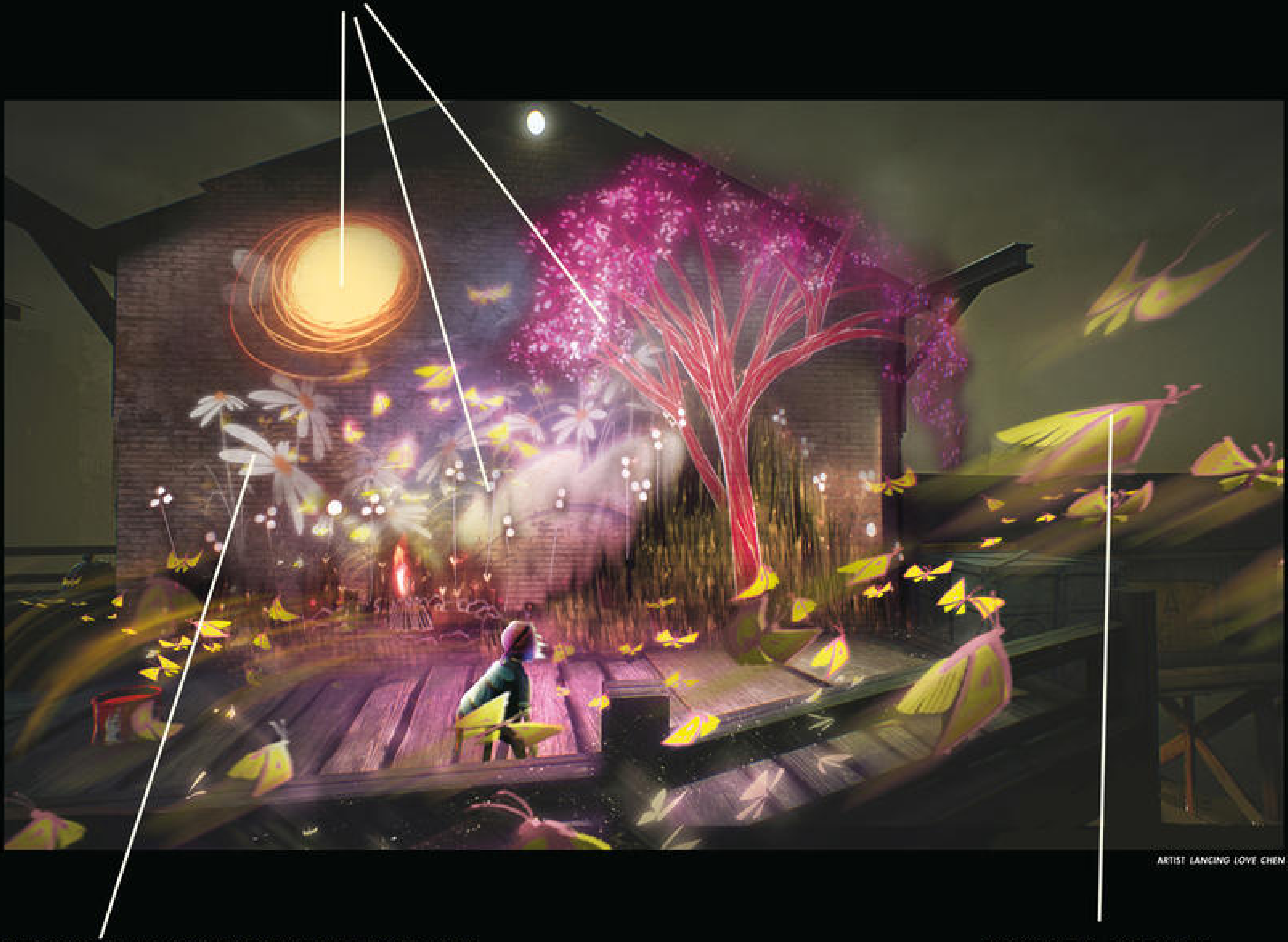
As we progressed developing the Living Paint world, we started using more graphic, punchy shapes and found that read better as Ash's style. We also thought of what the paint would do on its own, as if it has its own mind.

ARTIST LANCING LOVE CHEN (THIS PAGE AND FACING PAGE)





FOREGROUND: PAINTED ASSETS

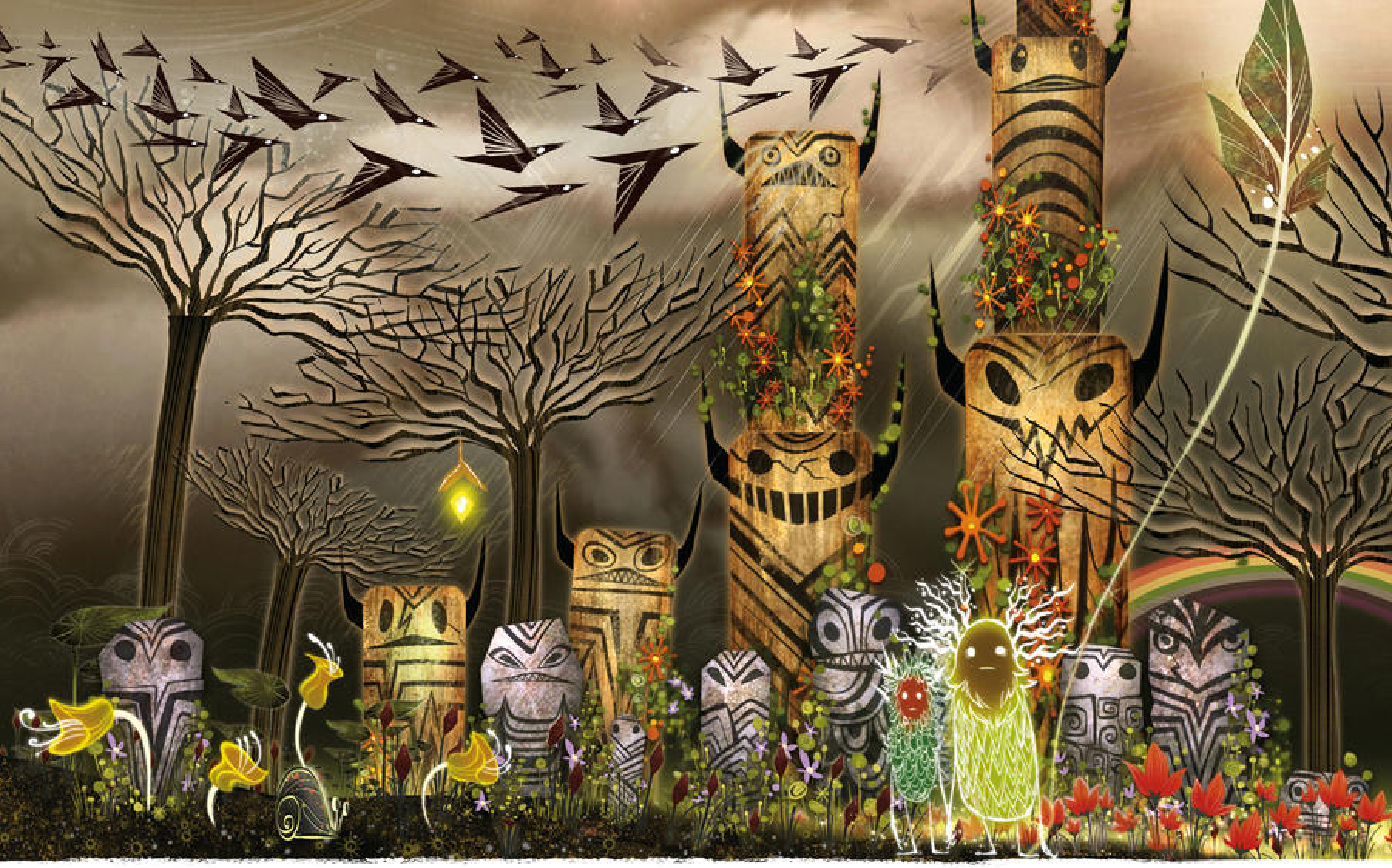


ARTIST LANCING LOVE CHEN

BACKGROUND PLANE: PAINT CHALLENGE ART

BUTTERFLY PARTICLES

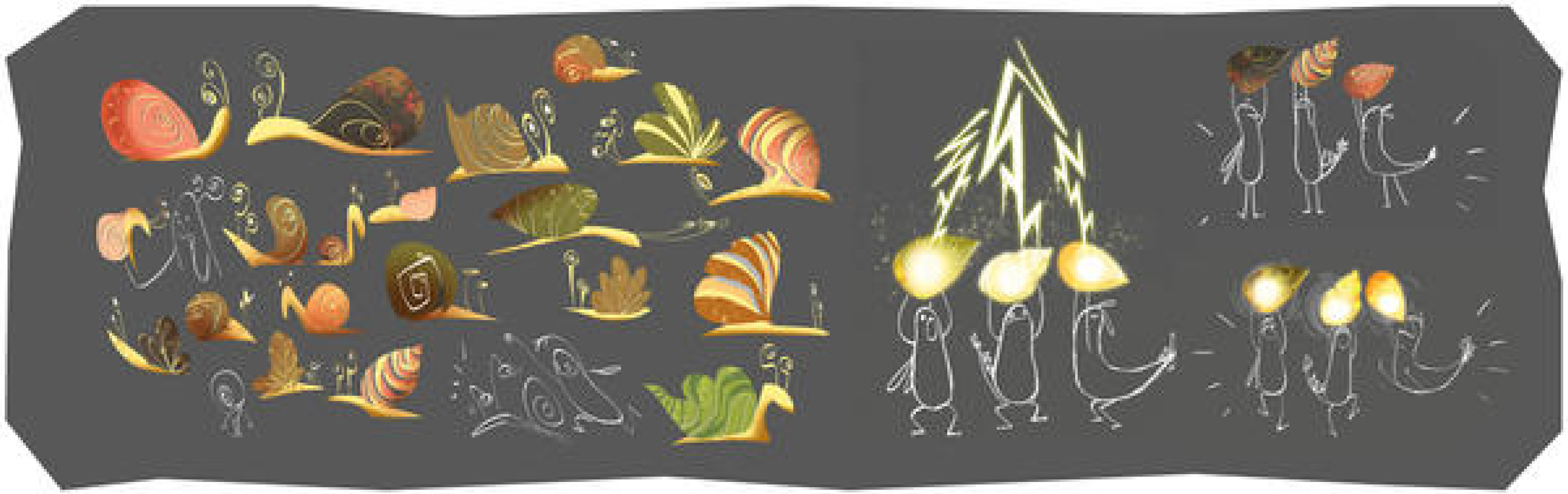
Breaking down where the painted elements would sit was also important for us to keep track of. The amount of ways people can paint things was endless, so making sure there was some order was needed.

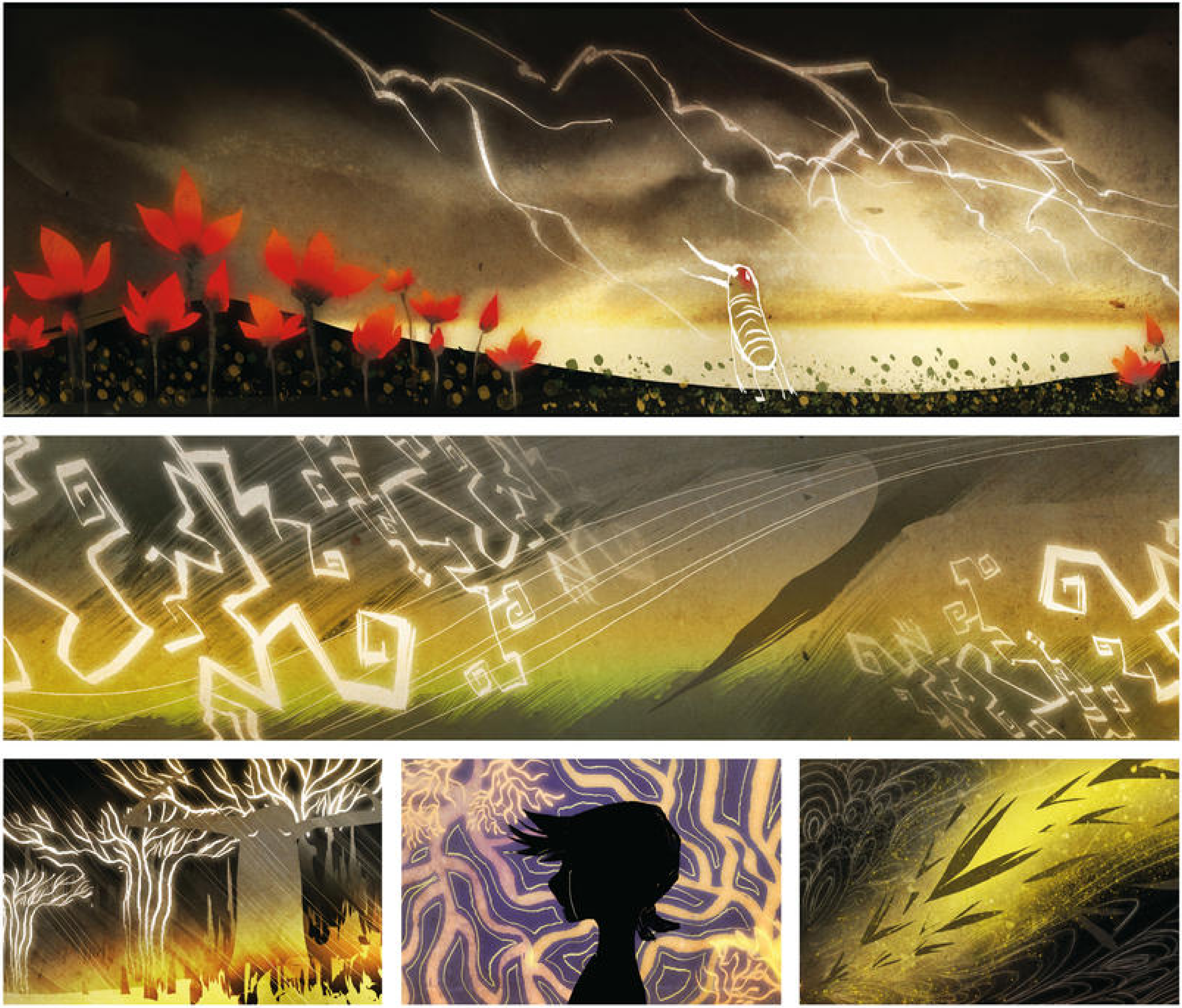


STORM

The Storm biome was designed with Ash's point in the story in mind, when he's feeling his lowest. We also wanted to add more interactive designs in this biome, both with Ash and each other.

ARTIST *LANCING LOVE CHEN* (THIS PAGE AND FACING PAGE)



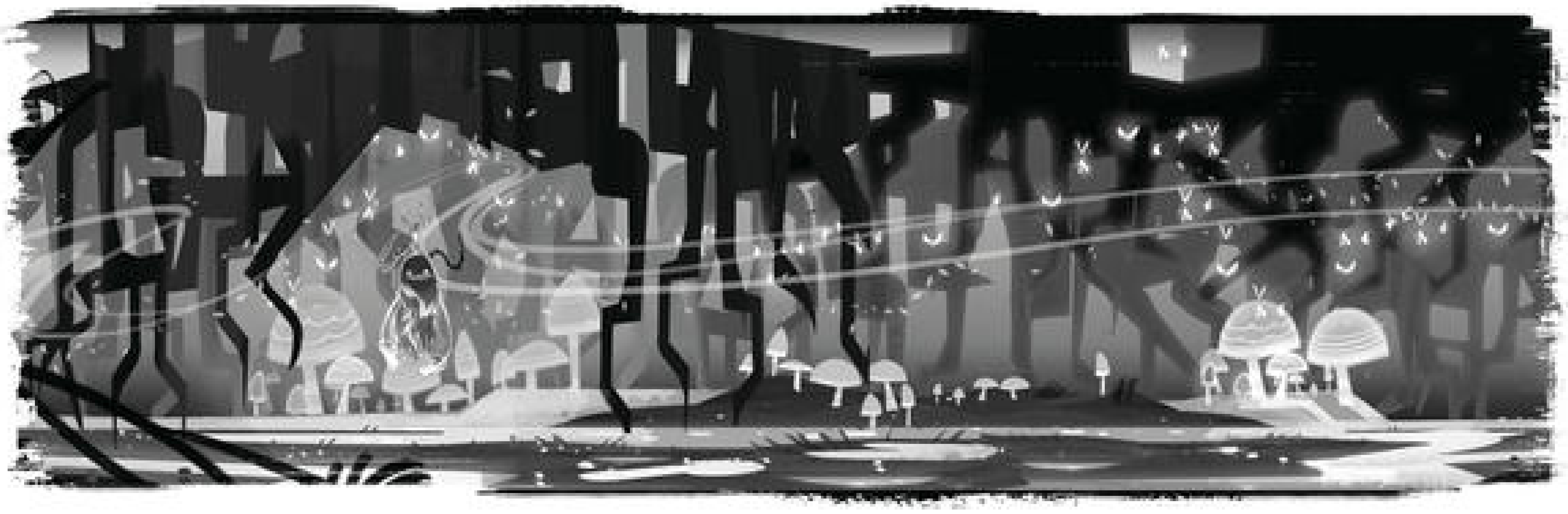


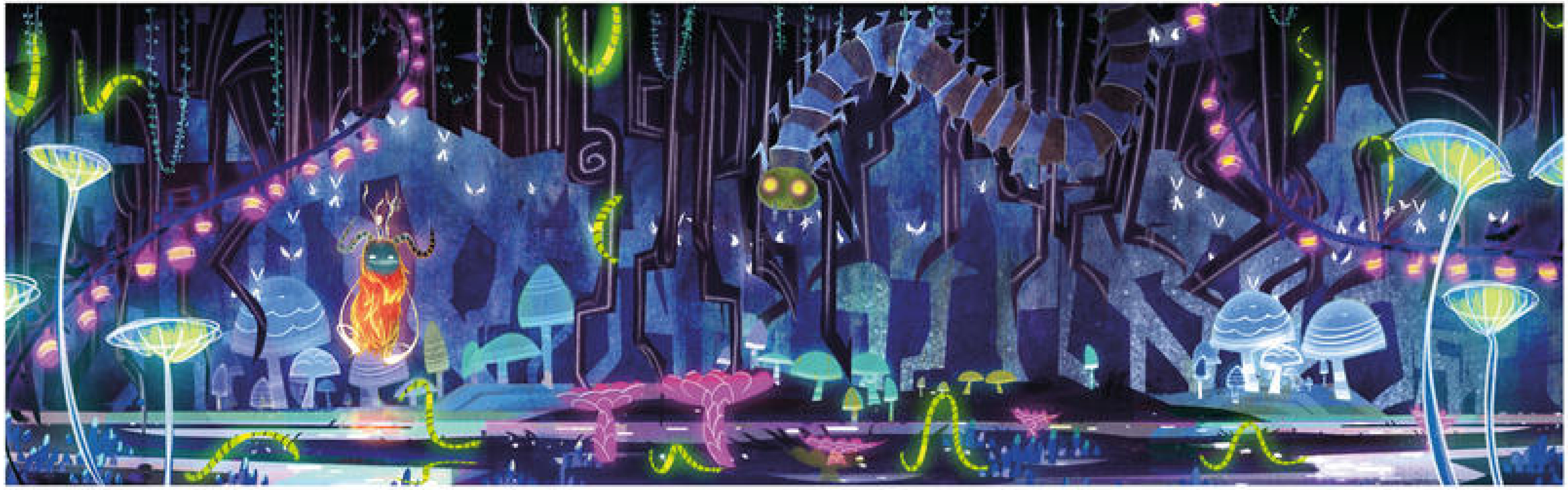
Thumbnails of each biome were done to get the mood without committing to a granular call-out piece right away. They also helped us plan out which designs were in the final set.

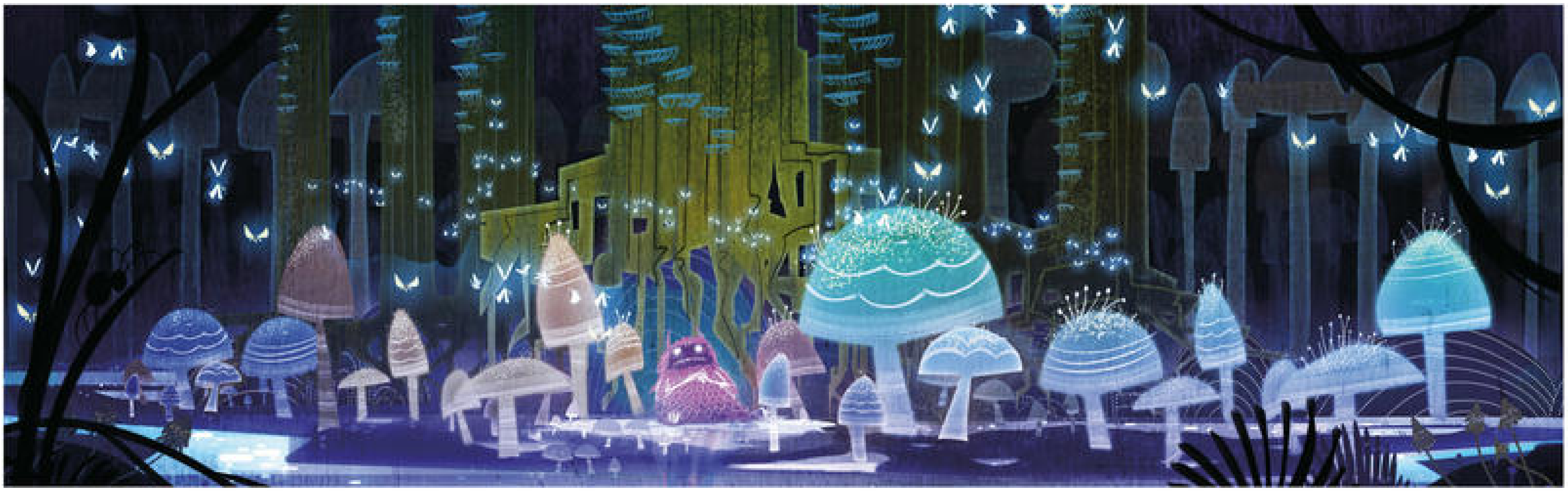
MUSHROOM

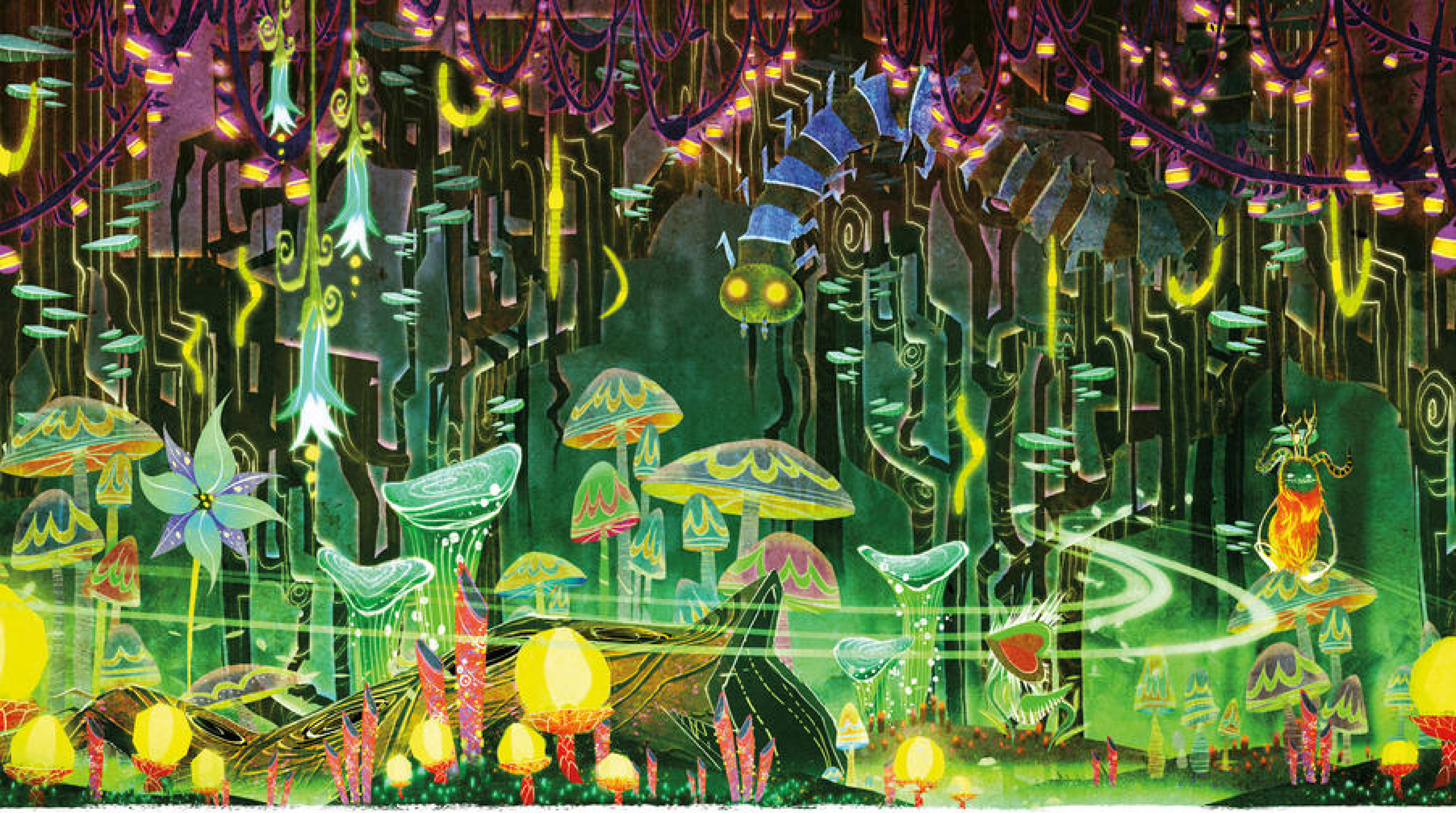
In this biome we wanted to encapsulate a jungle- or swamp-like feel as the Waterways biome. We also played with illumination and sound interaction, sort of like Ash's guiding light through the darkness.

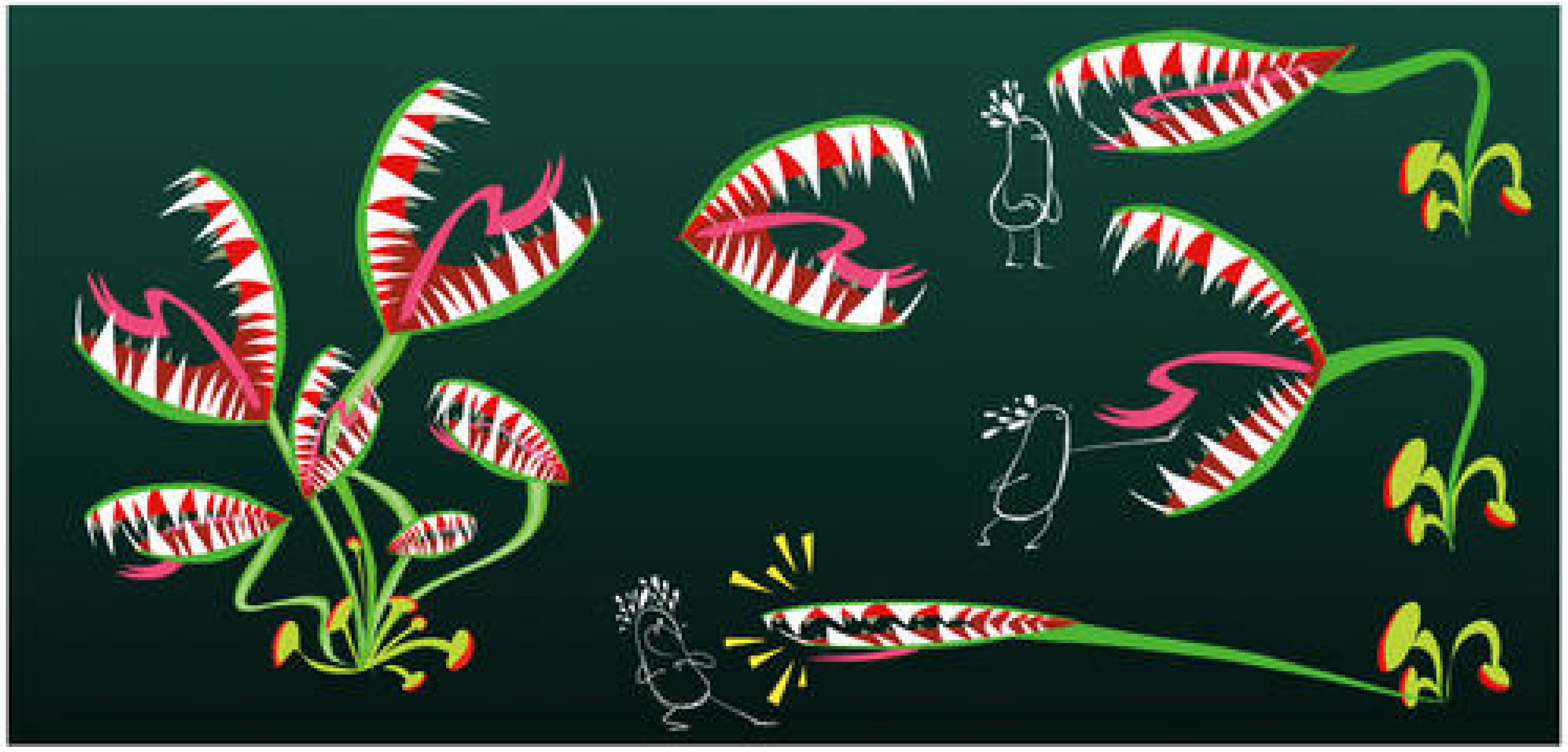
ARTIST *JEFF SANGALLI (THIS PAGE)*

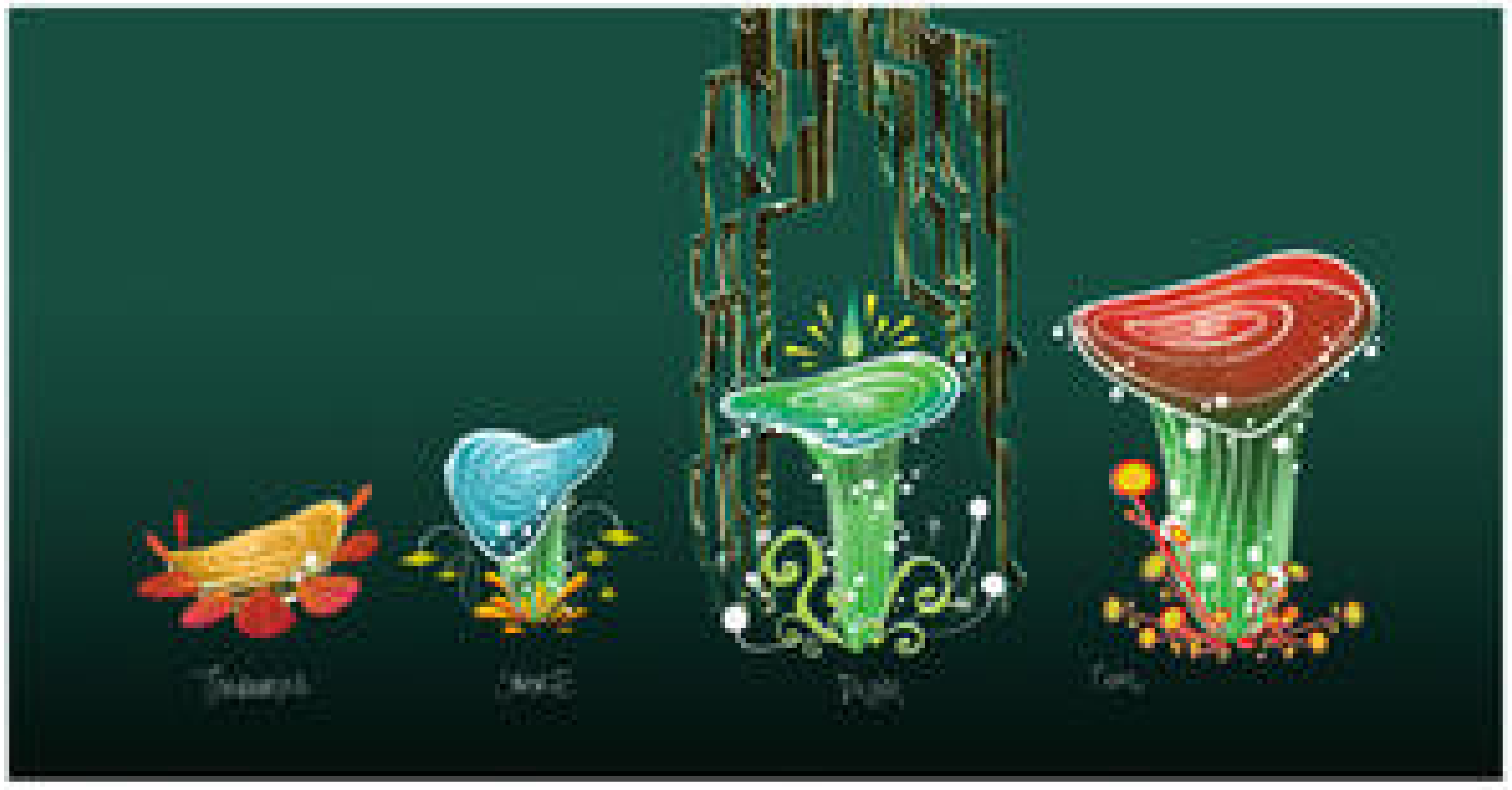






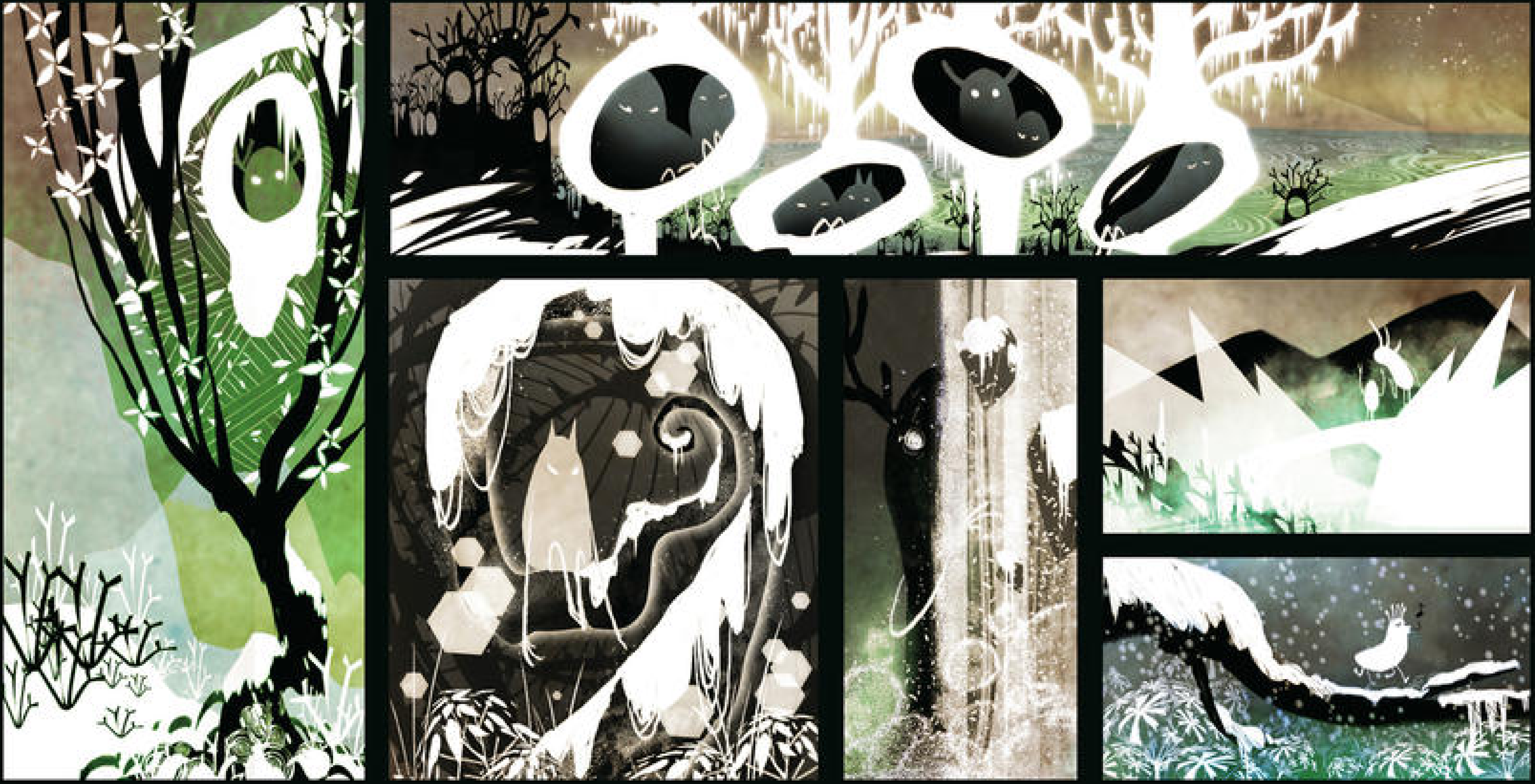






Neon creepy crawlies and tiny monsters were the main focus of this biome. Anything that would potentially pique the curiosity of a Genie.

ARTIST LANCING LOVE CHEN (THIS PAGE)

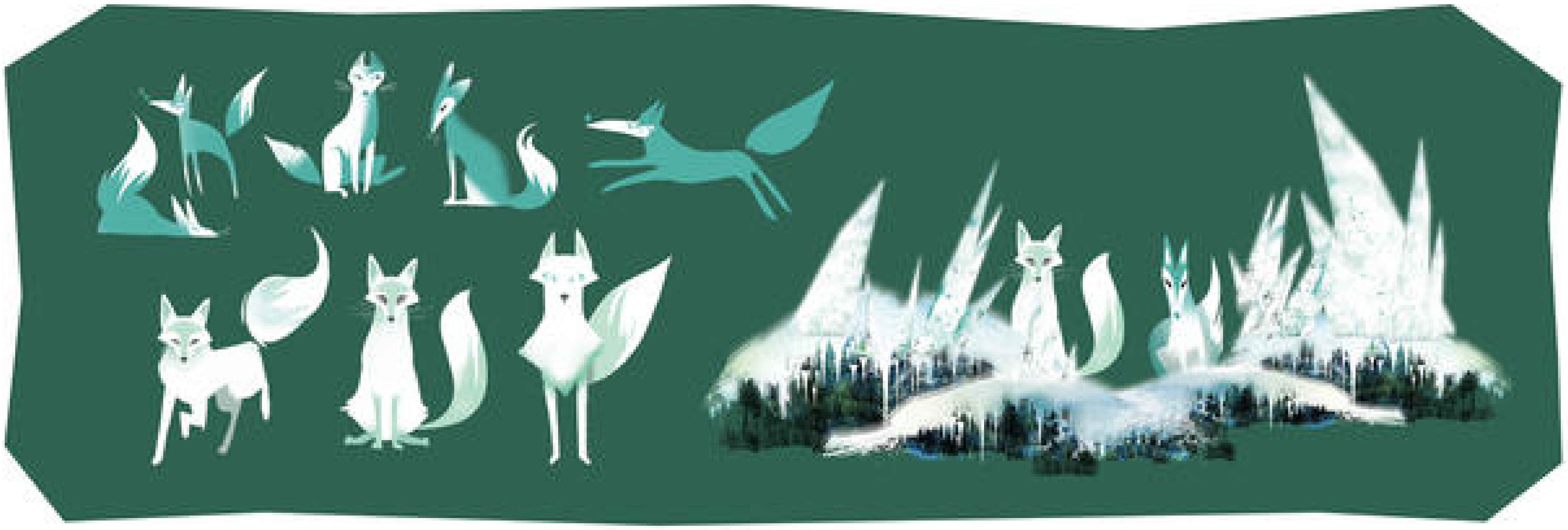


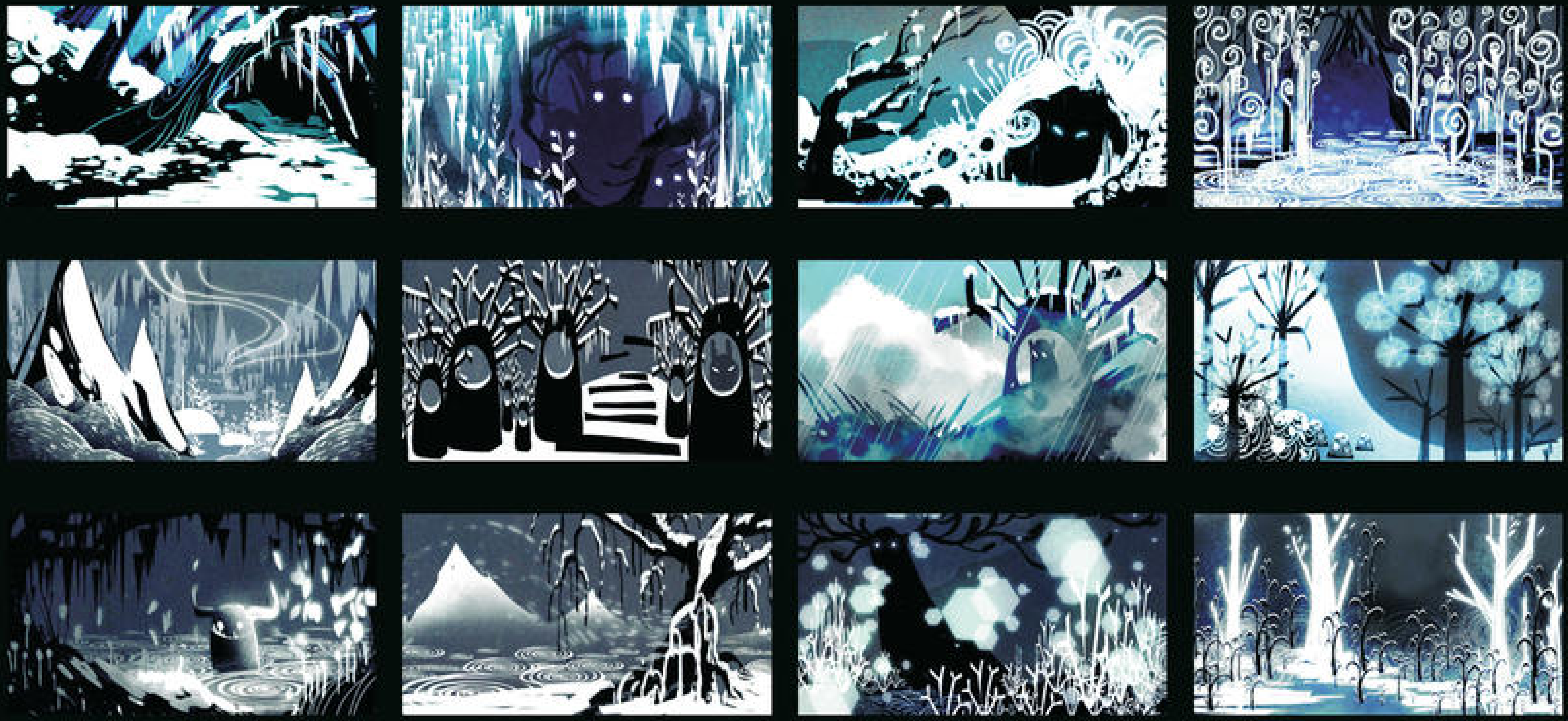
INTEREST POINTS :
- TREEHOUSES
- NESTS
- HOLLOWS
- GIANT ROOTS
- WATERFALL CAVERNS
- CAVES WITHIN GIANT STRUCTURES
- FROZEN AQUARIUM
- GIANT STRUCTURES THAT RELEASE EFFECTS OR ANIMALS
- BRIDGES
- GIGANTIC WHALES (ANIMALS)
- HANGING FRUIT
- DEAD TREES/EERIENESS
- SKELETONS
- RUINS
- BURROWS
- ANIMALS WITHIN HIDDEN PLACES (CLUSTERS)
- FLOWERS/GREENERY AMONG SNOW (OASIS)

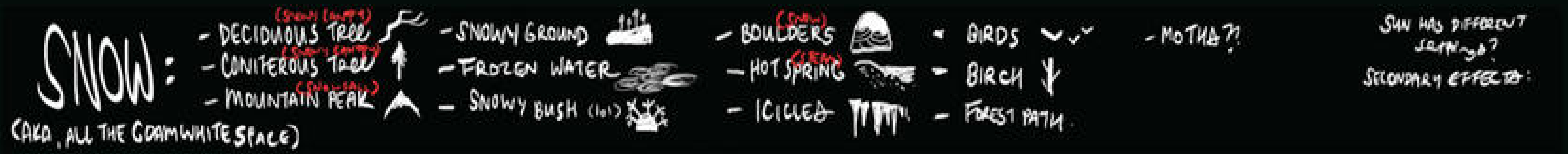
SNOW

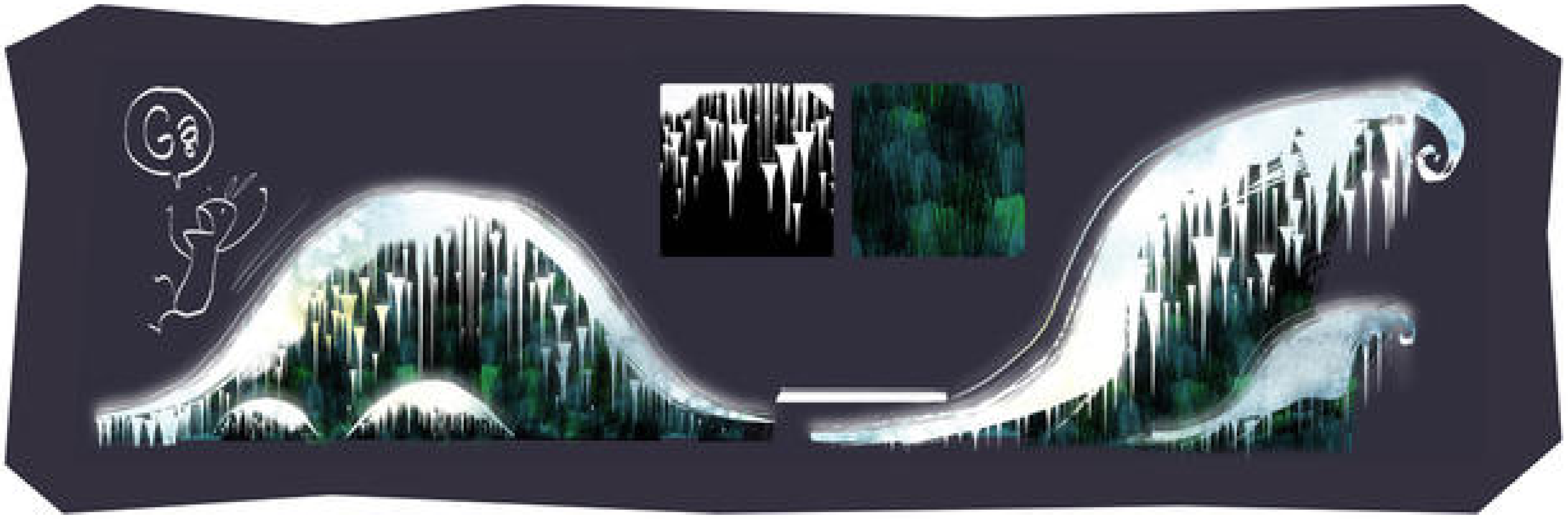
In this biome there's a lot of dense patterning, textures, and some of that mysterious feel we wanted to bring back to balance out the zaniness of the Genies.

ARTIST LANCING LOVE CHEN (THIS PAGE AND FACING PAGE)






SNOW:
- DECIDUOUS TREE (SNOW CANOPY)
- CONIFEROUS TREE (SNOWY CANOPY)
- MOUNTAIN PEAK (SNOWCAP)
(AKA, ALL THE GDAMWHITE SPACE)
- SNOWY GROUND
- FROZEN WATER
- SNOWY BUSH (lol)
- BOULDERS (SNOW)
- HOT SPRING (STEAM)
- ICICLES
- BIRDS
- BIRCH
- FOREST PATH.
- MOTHS?!
SUN HAS DIFFERENT SETTINGS?
SECONDARY EFFECTS:

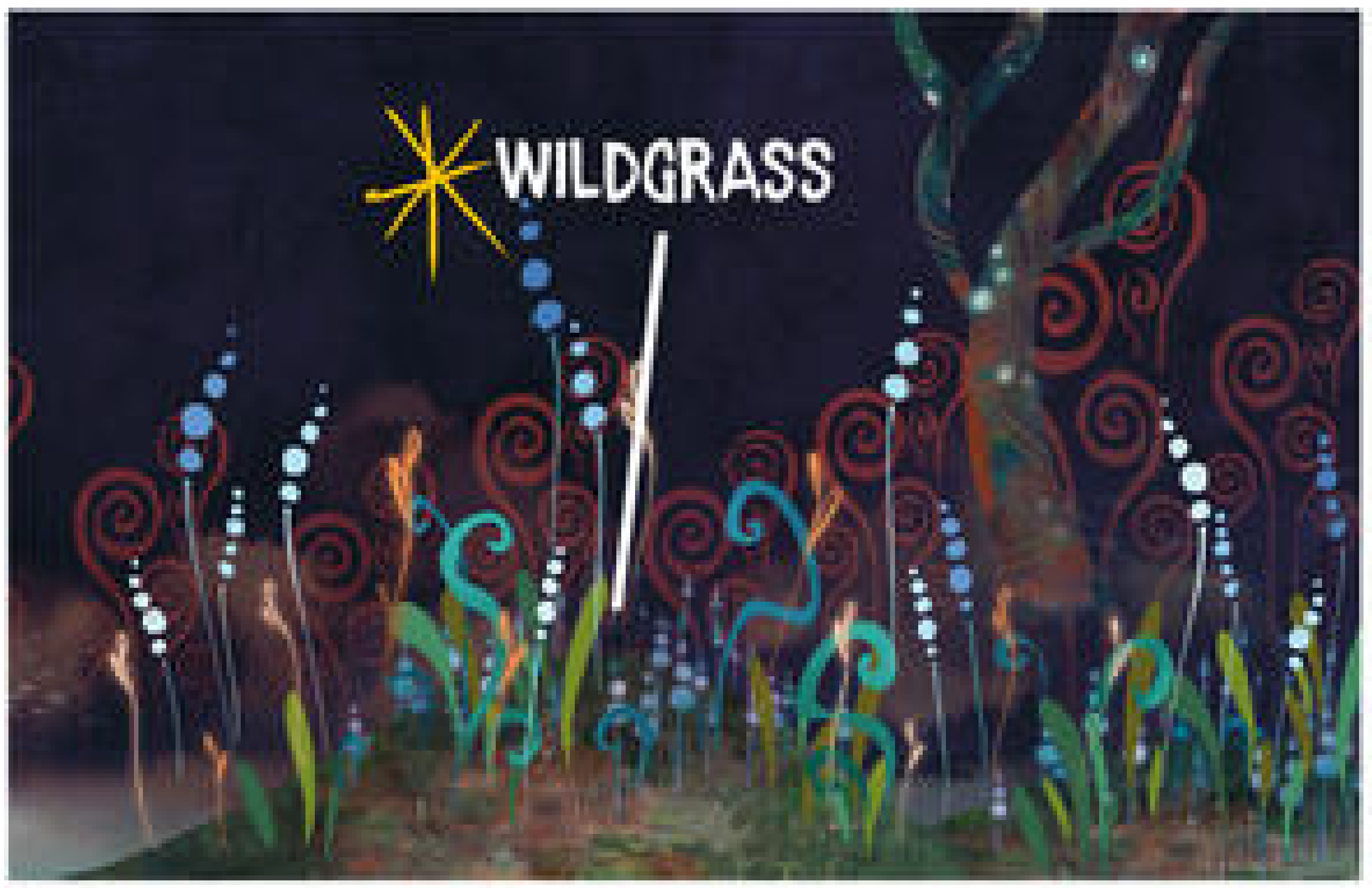


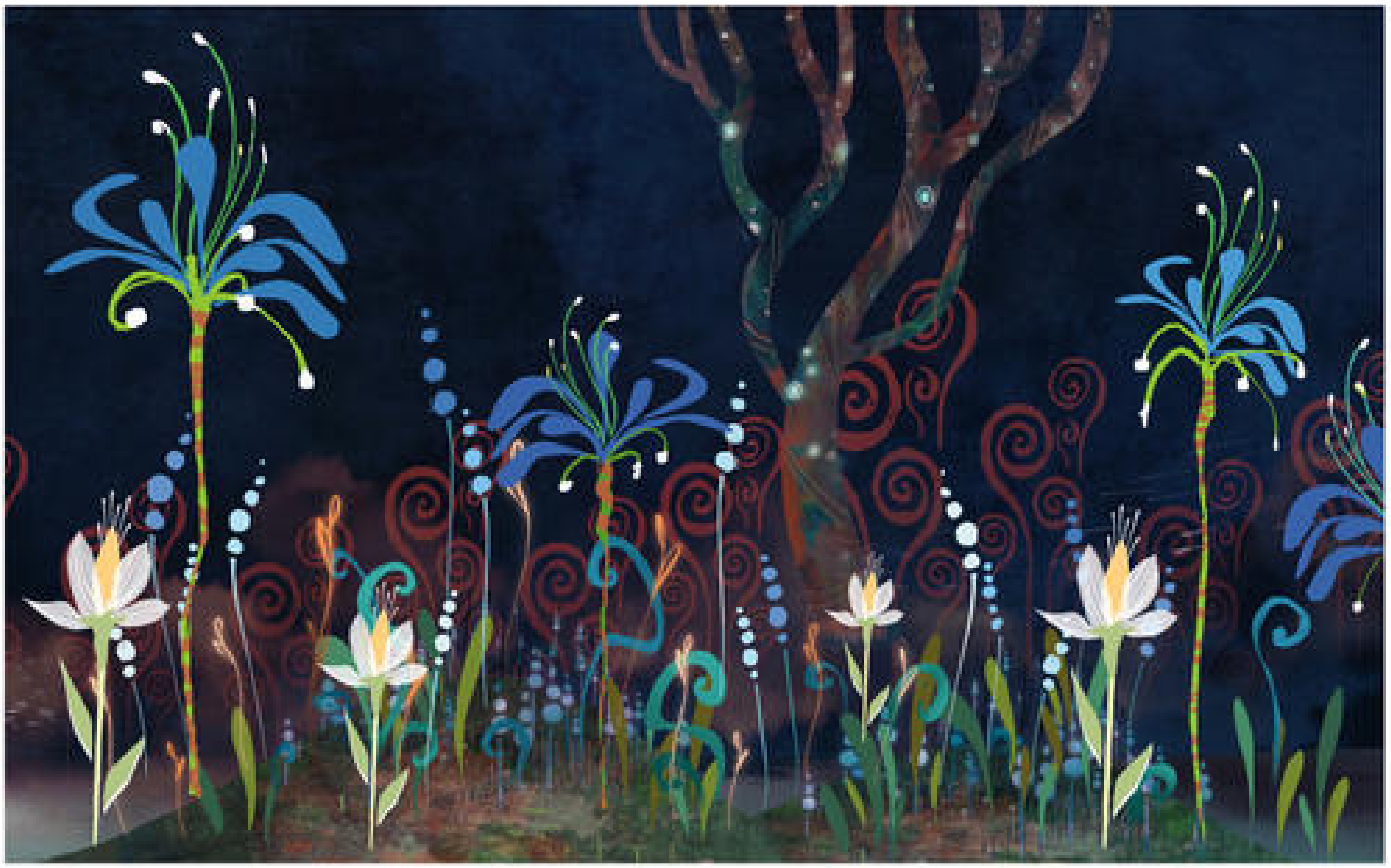
Doing these thumbnails helped preserve the visual integrity of the biomes as a whole, without getting distracted by the technicalities of each design. After a set was done, we would then go in and single out which ones we wanted.

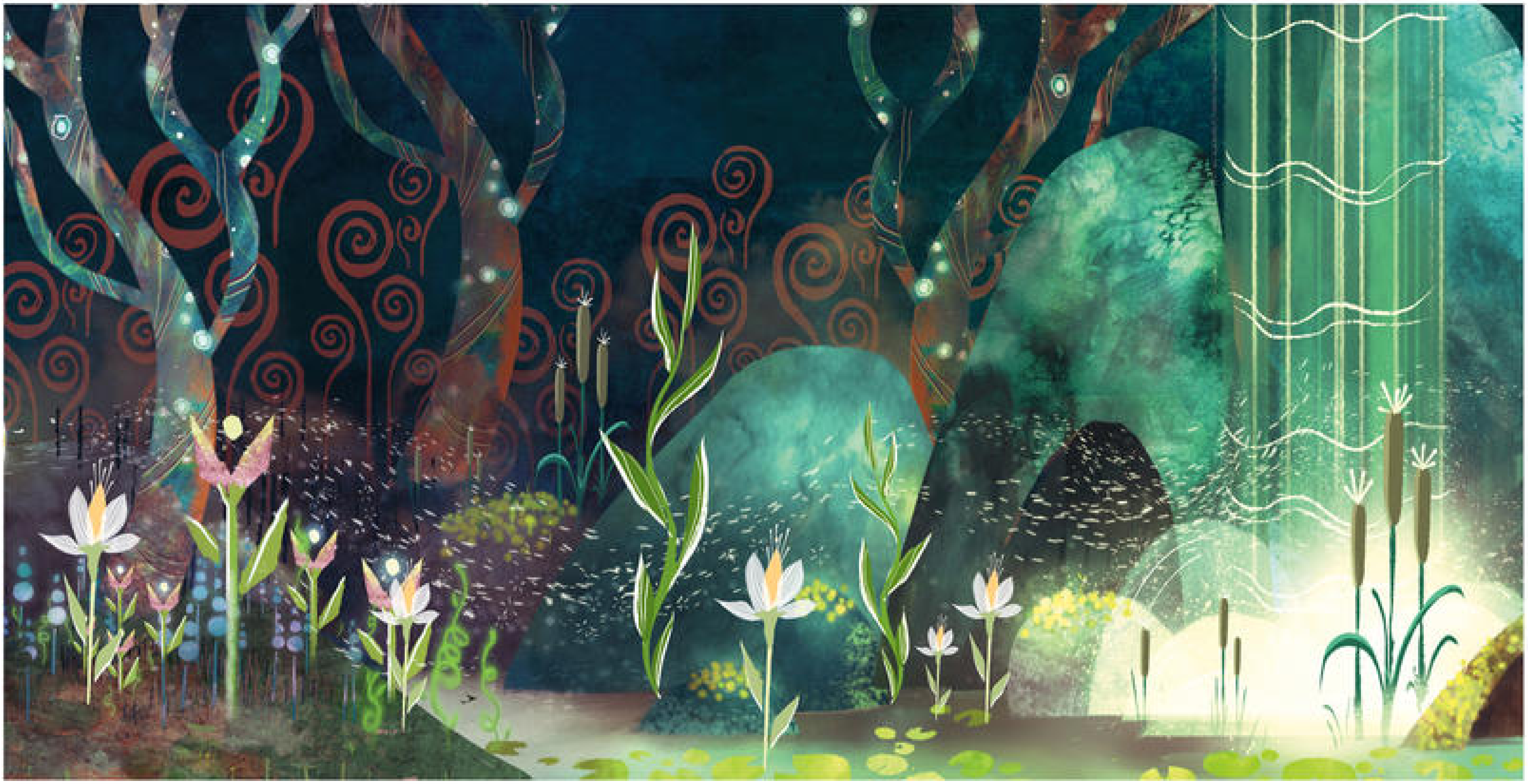
POND

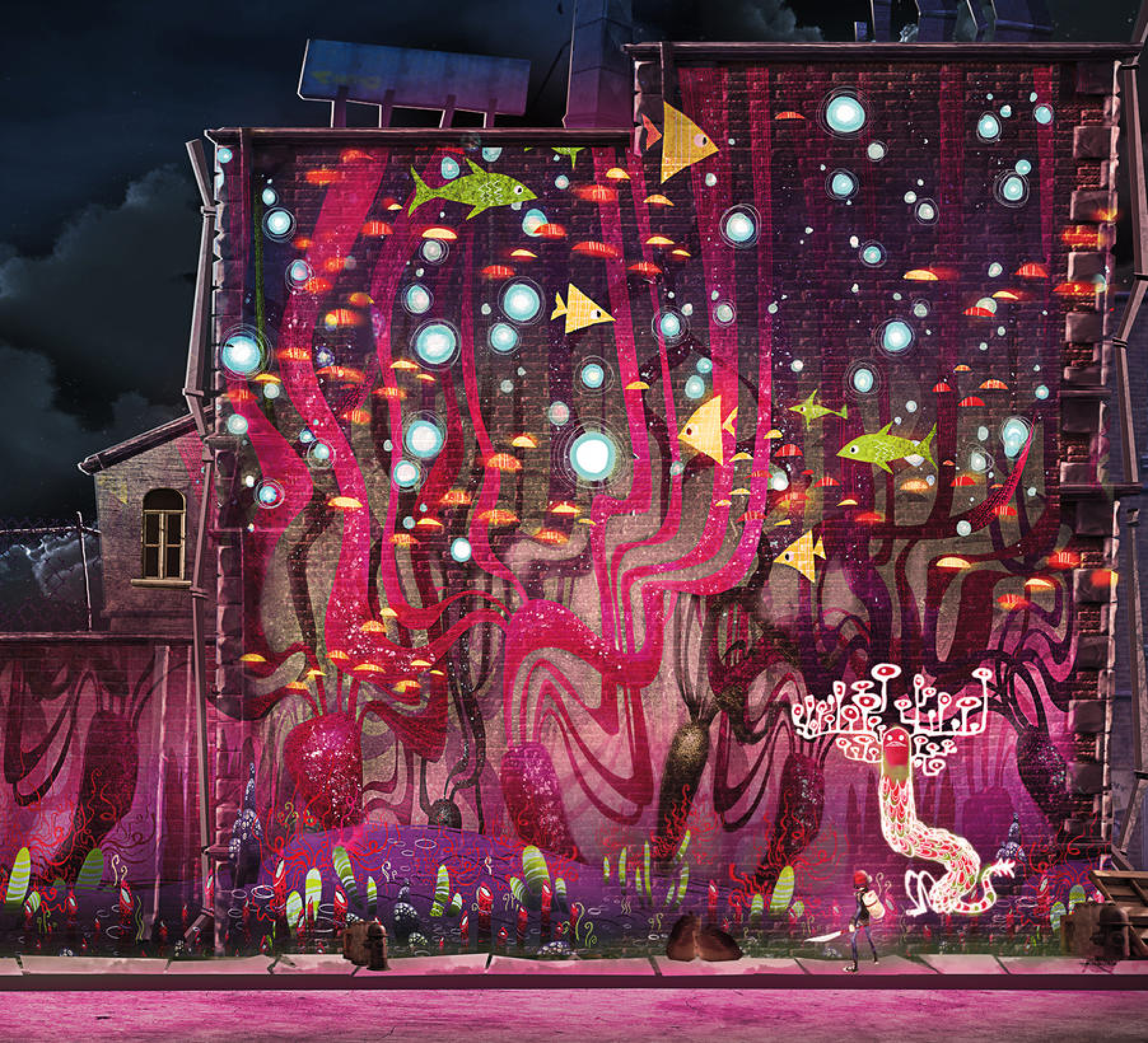
Pond was more about solidifying the Living Paint world even further, using abstraction and seeing how much we could detach from reality as much as possible.

ARTIST LANCING LOVE CHEN (THIS PAGE AND FACING PAGE)





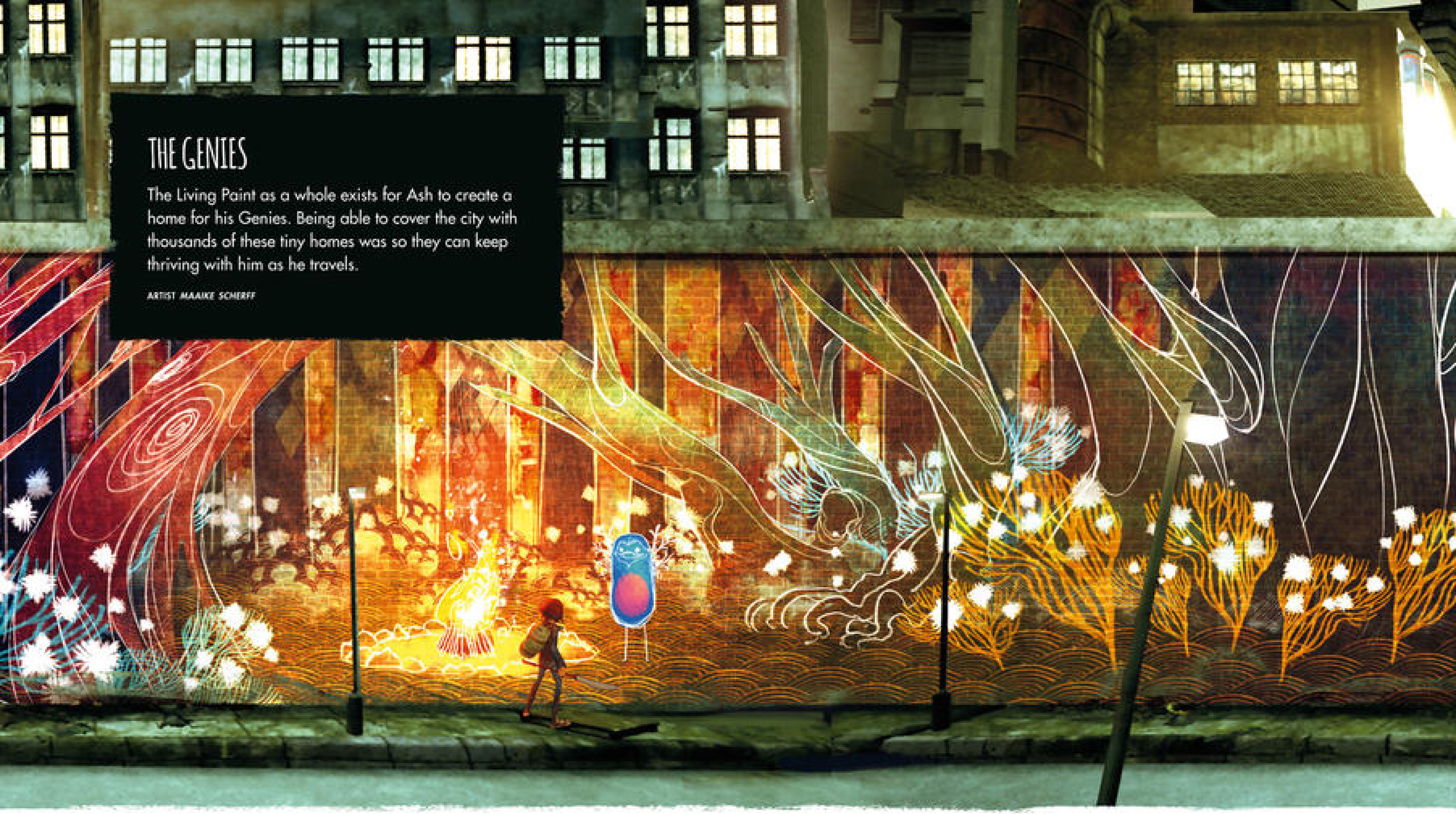


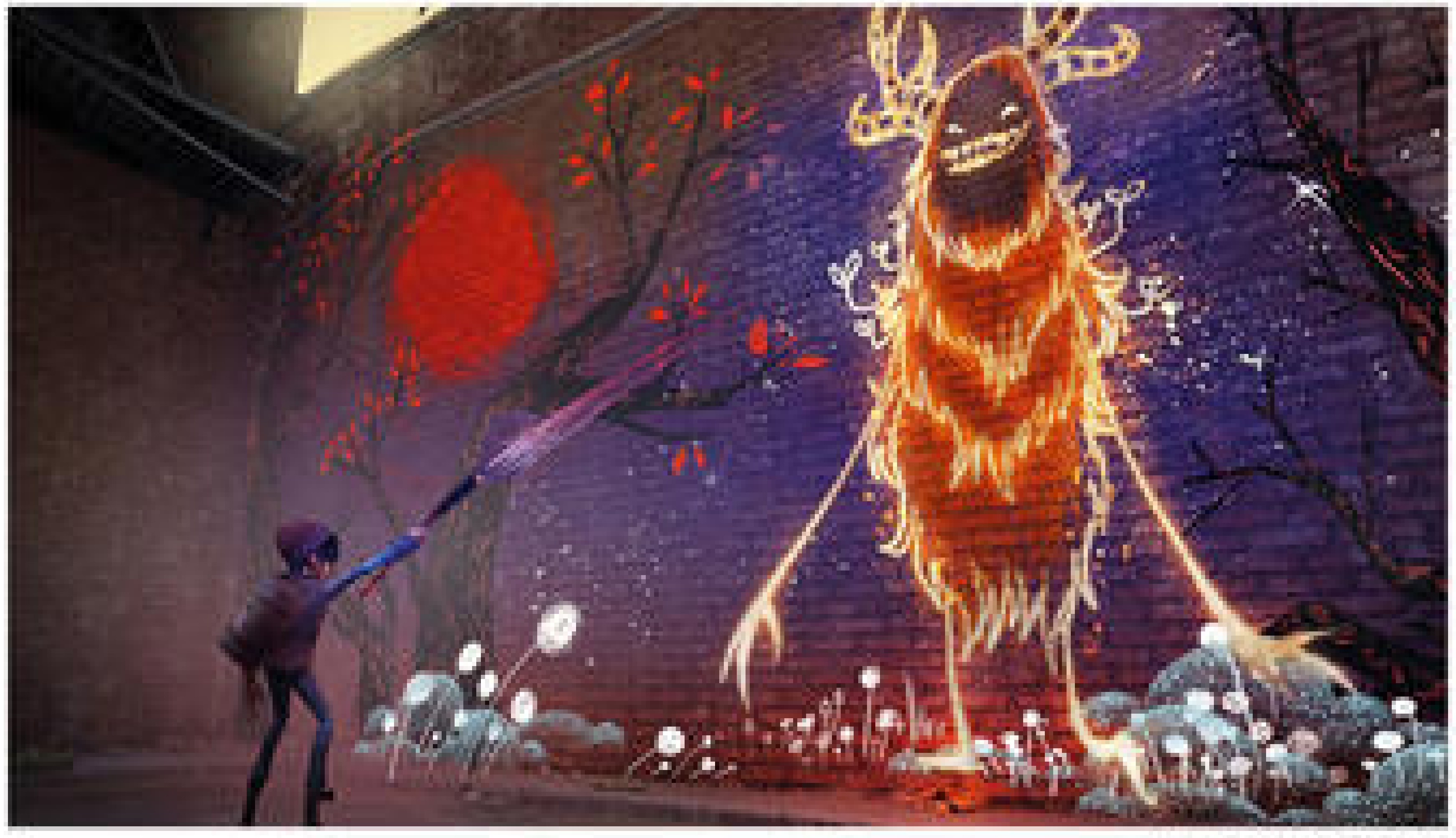


THE GENIES

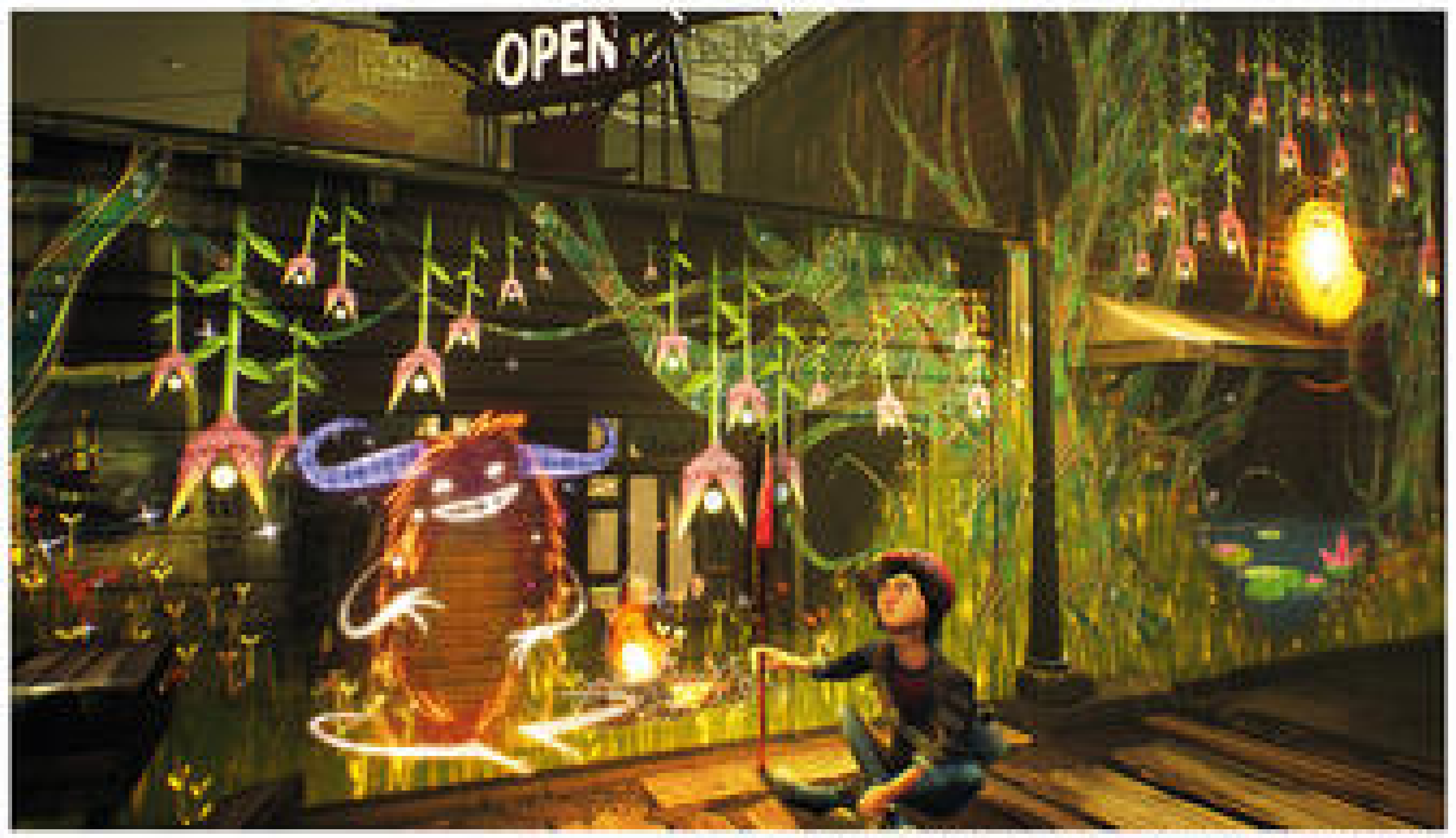
The Living Paint as a whole exists for Ash to create a home for his Genies. Being able to cover the city with thousands of these tiny homes was so they can keep thriving with him as he travels.

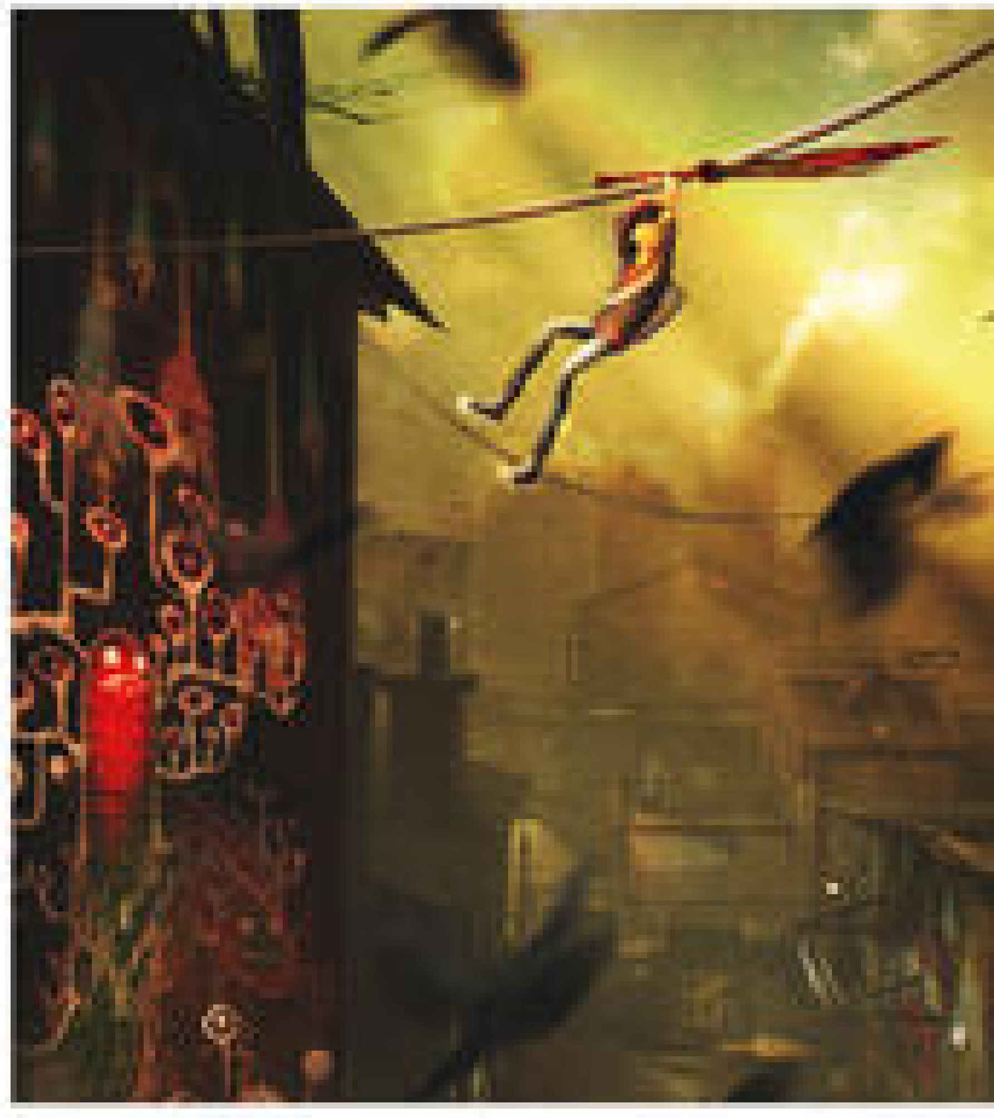
ARTIST *MAAIKE SCHERFF*





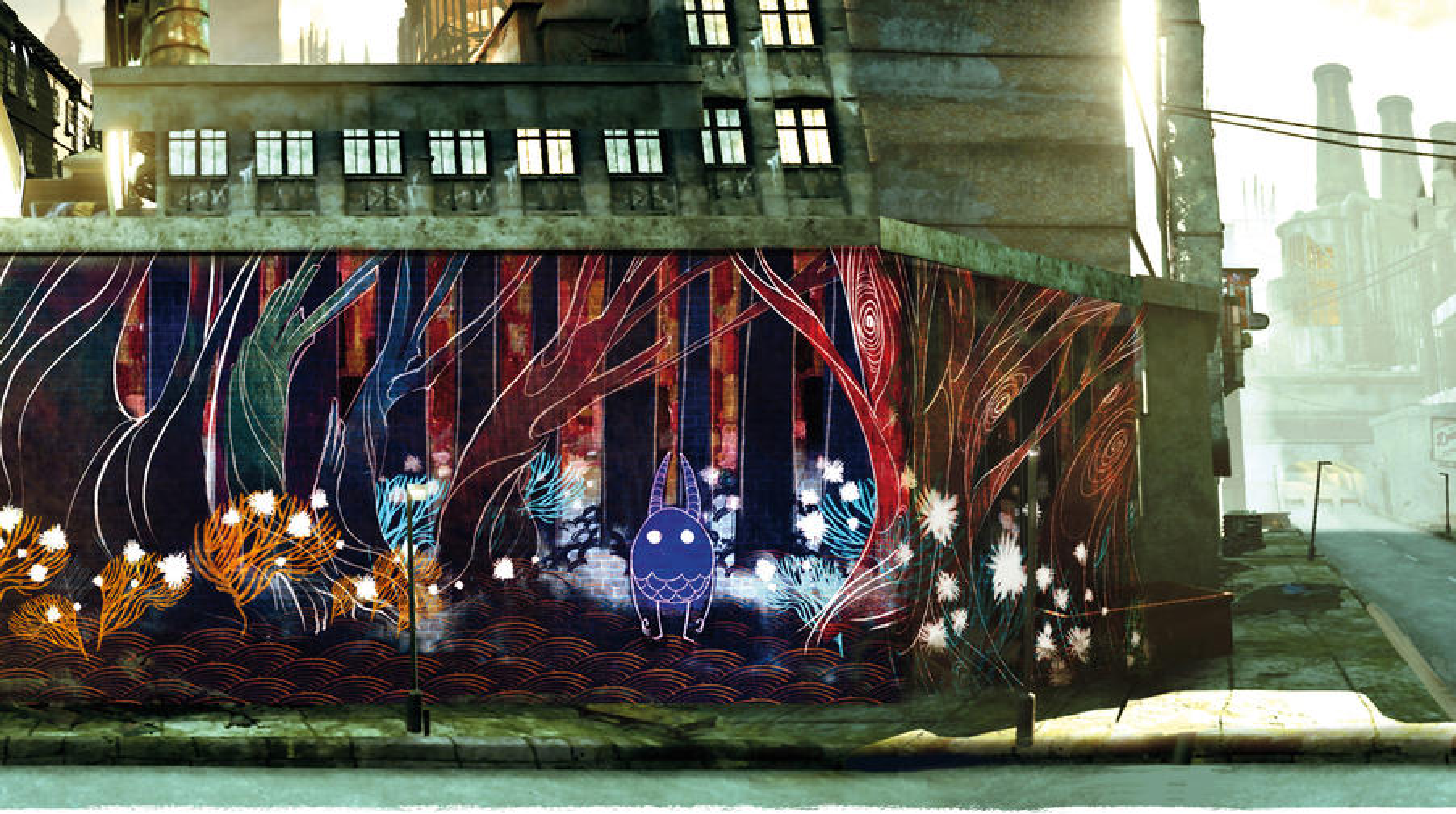
ARTIST *MAAIKE SCHERFF*

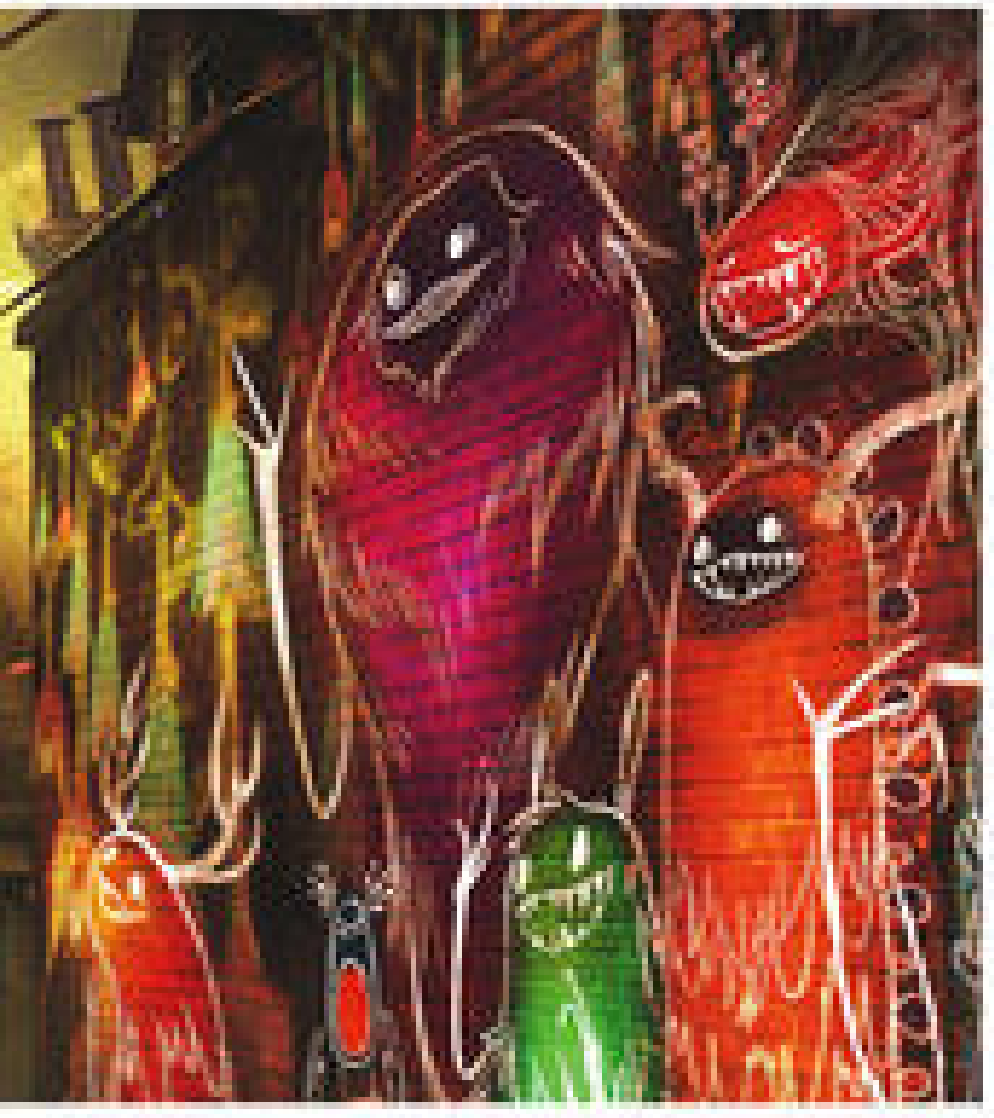


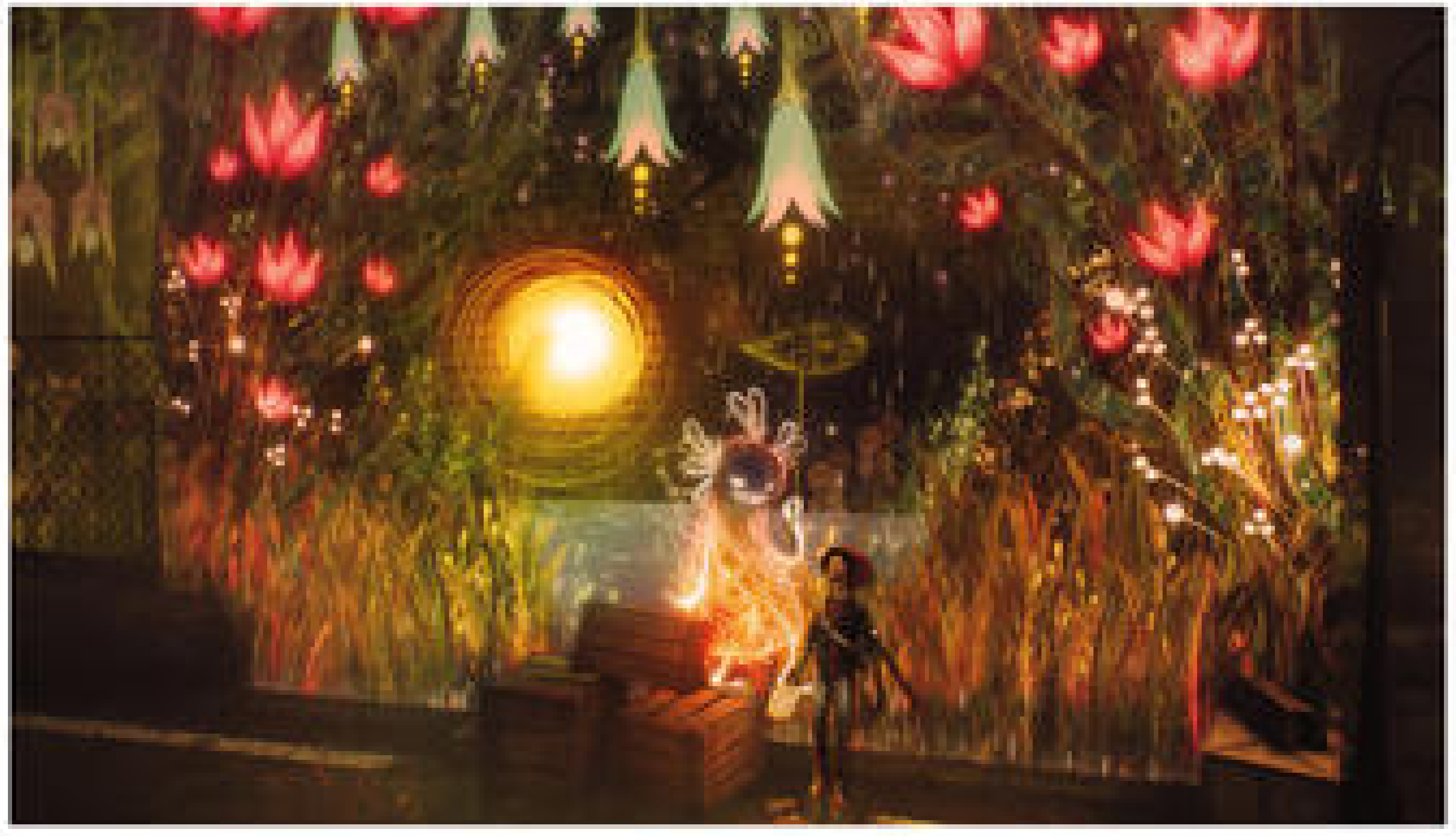


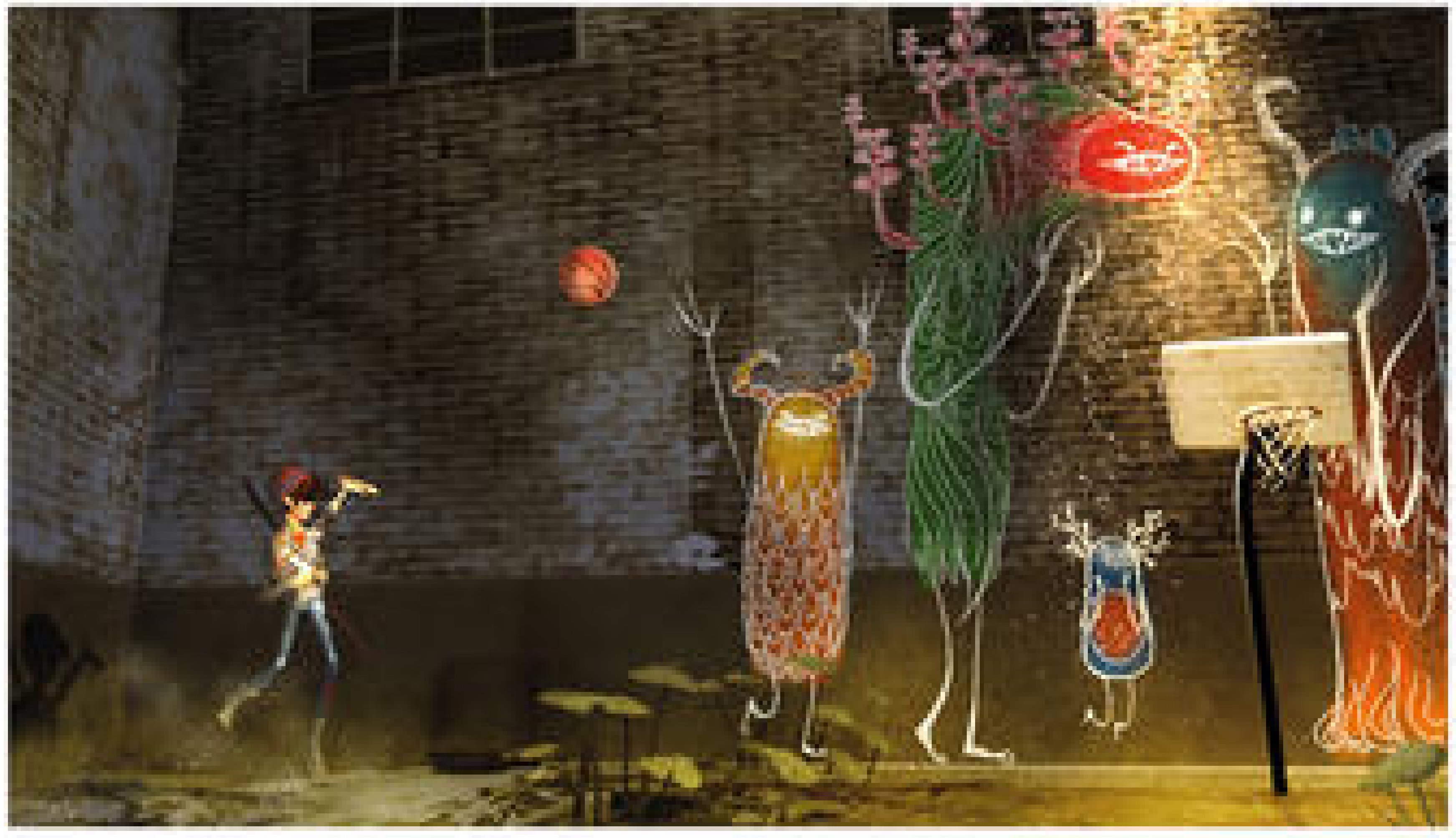
ARTIST *LANCING LOVE CHEN (THIS PAGE AND FACING PAGE)*

All of these images were made to help convey key gameplay ideas, and the mood of what it would feel like to paint landscapes for your Genies, hang out with them, adventure with them, and really communicate that these creatures were like the friends Ash wished he had in real life.

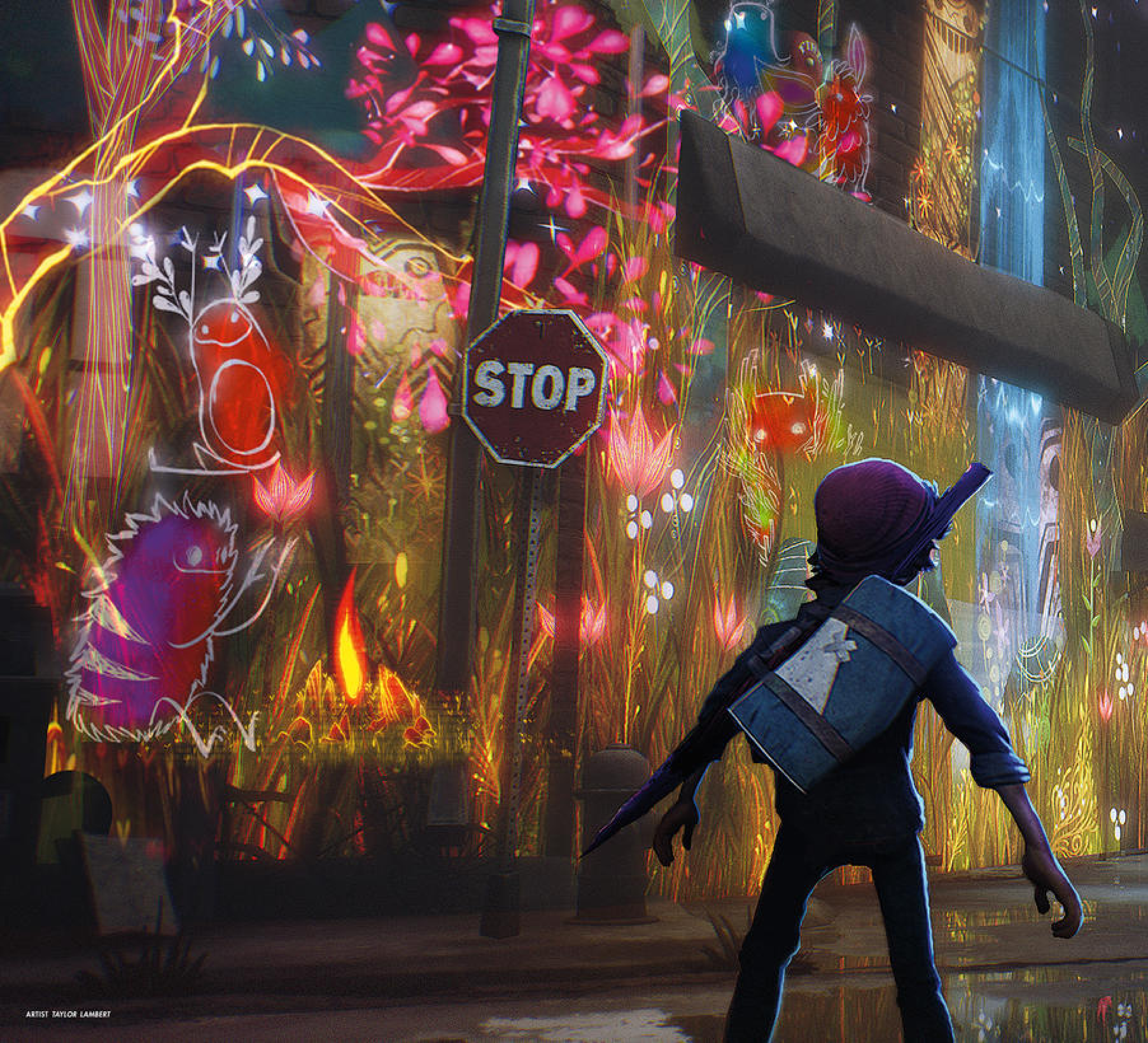




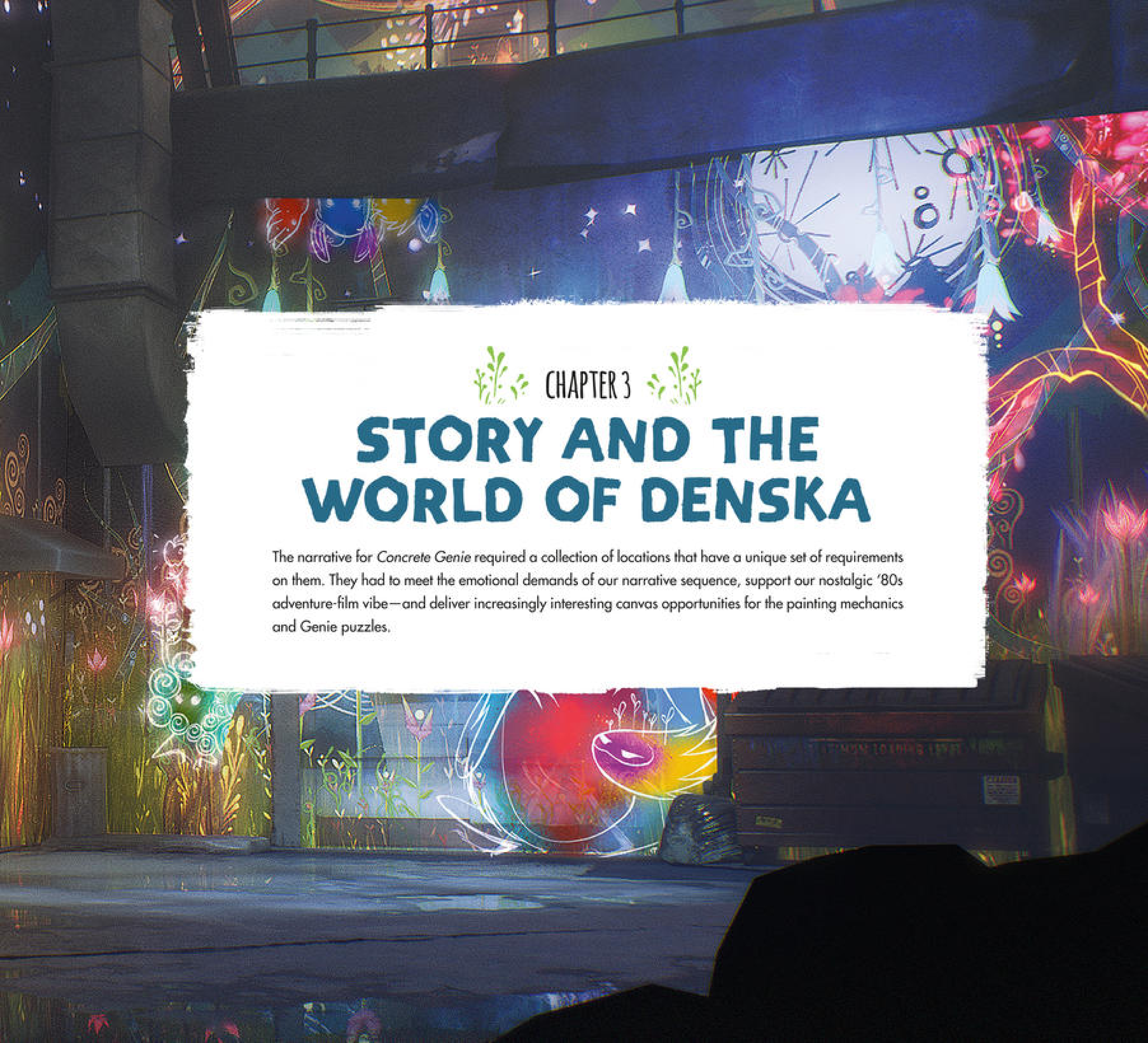




We wanted to make sure that the Living Paint also illuminated Denska, riding that line between reality and fantasy as much as possible.



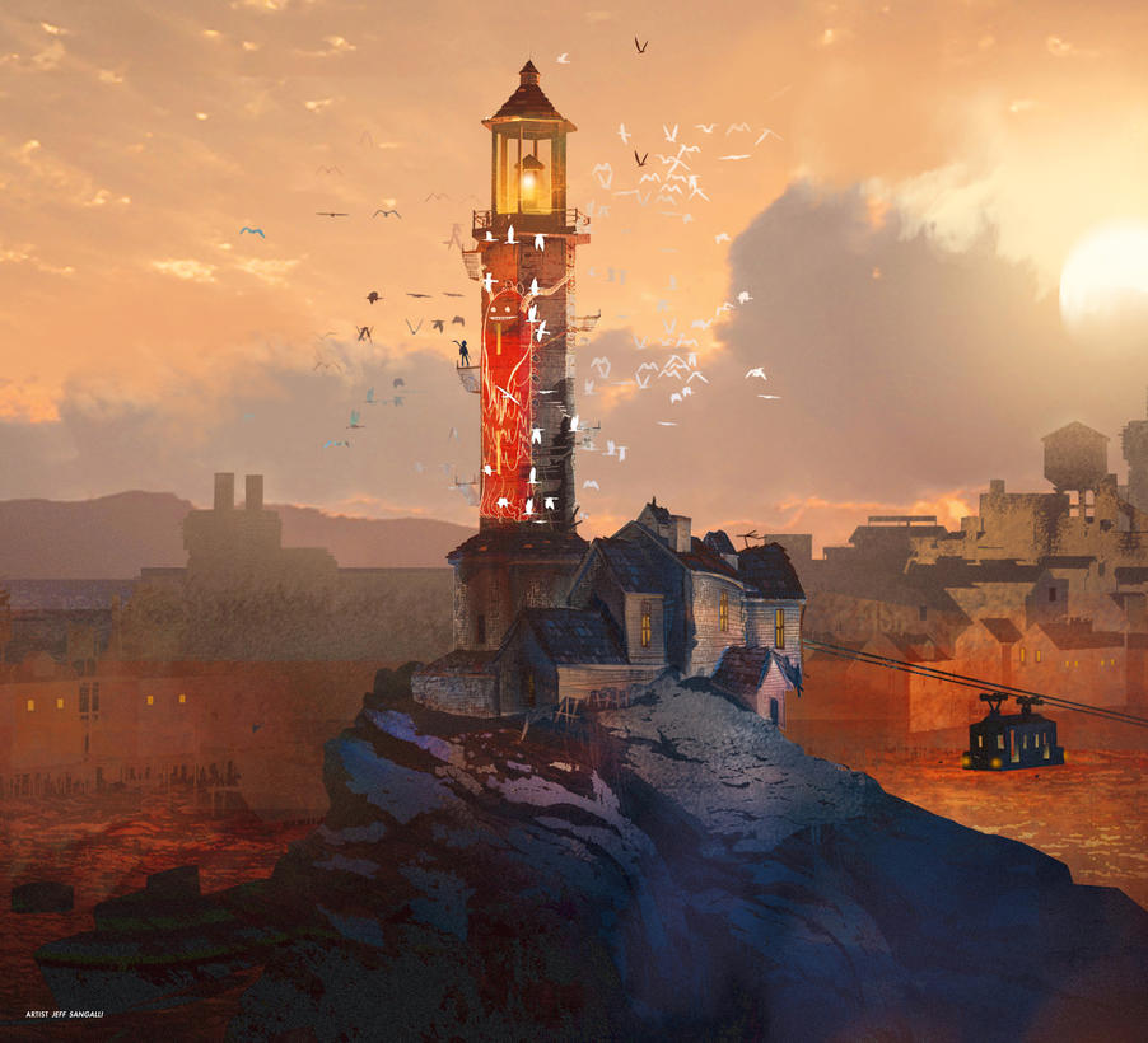
ARTIST *TAYLOR LAMBERT*



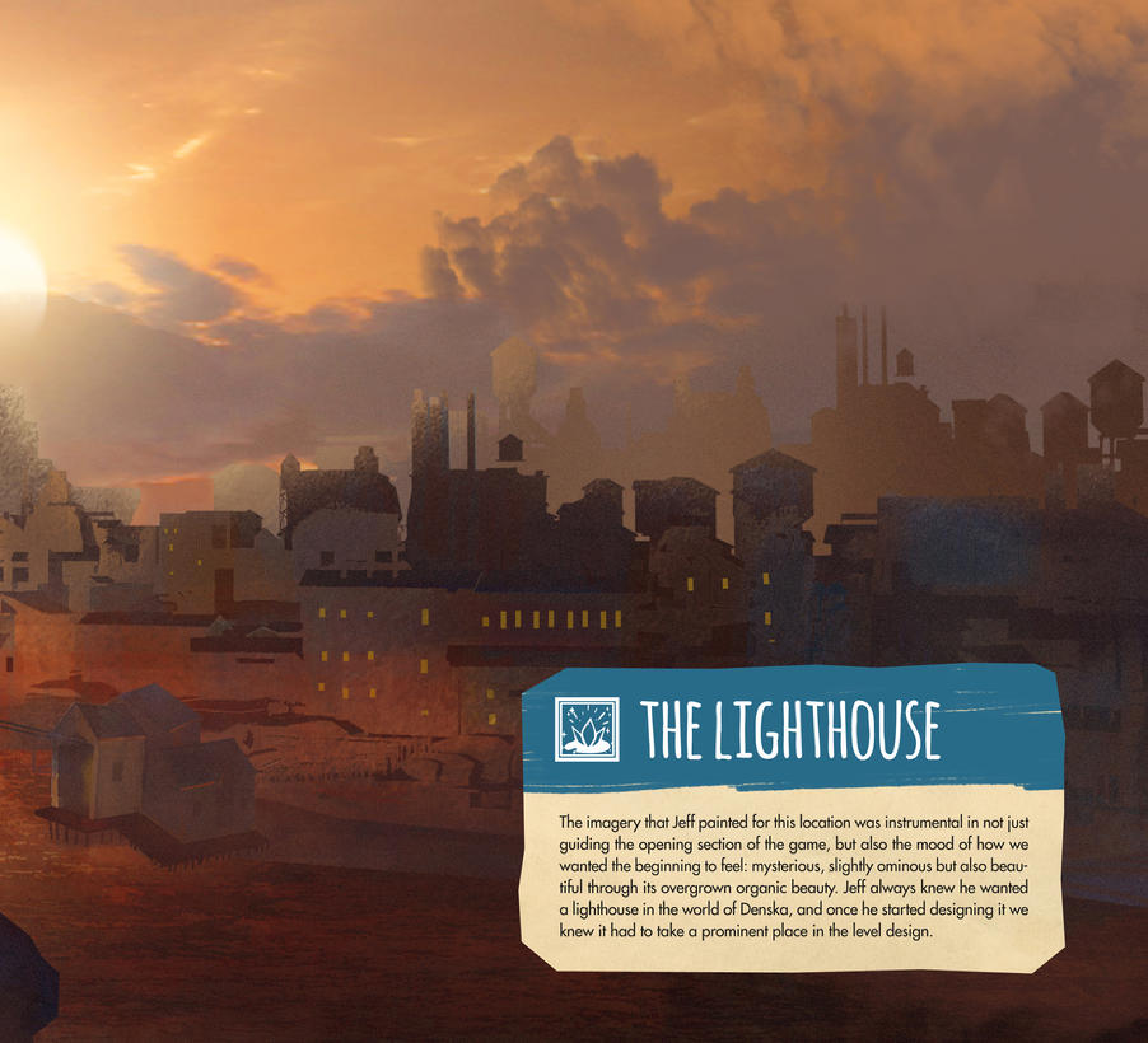
CHAPTER 3

STORY AND THE WORLD OF DENSKA

The narrative for *Concrete Genie* required a collection of locations that have a unique set of requirements on them. They had to meet the emotional demands of our narrative sequence, support our nostalgic '80s adventure-film vibe—and deliver increasingly interesting canvas opportunities for the painting mechanics and Genie puzzles.

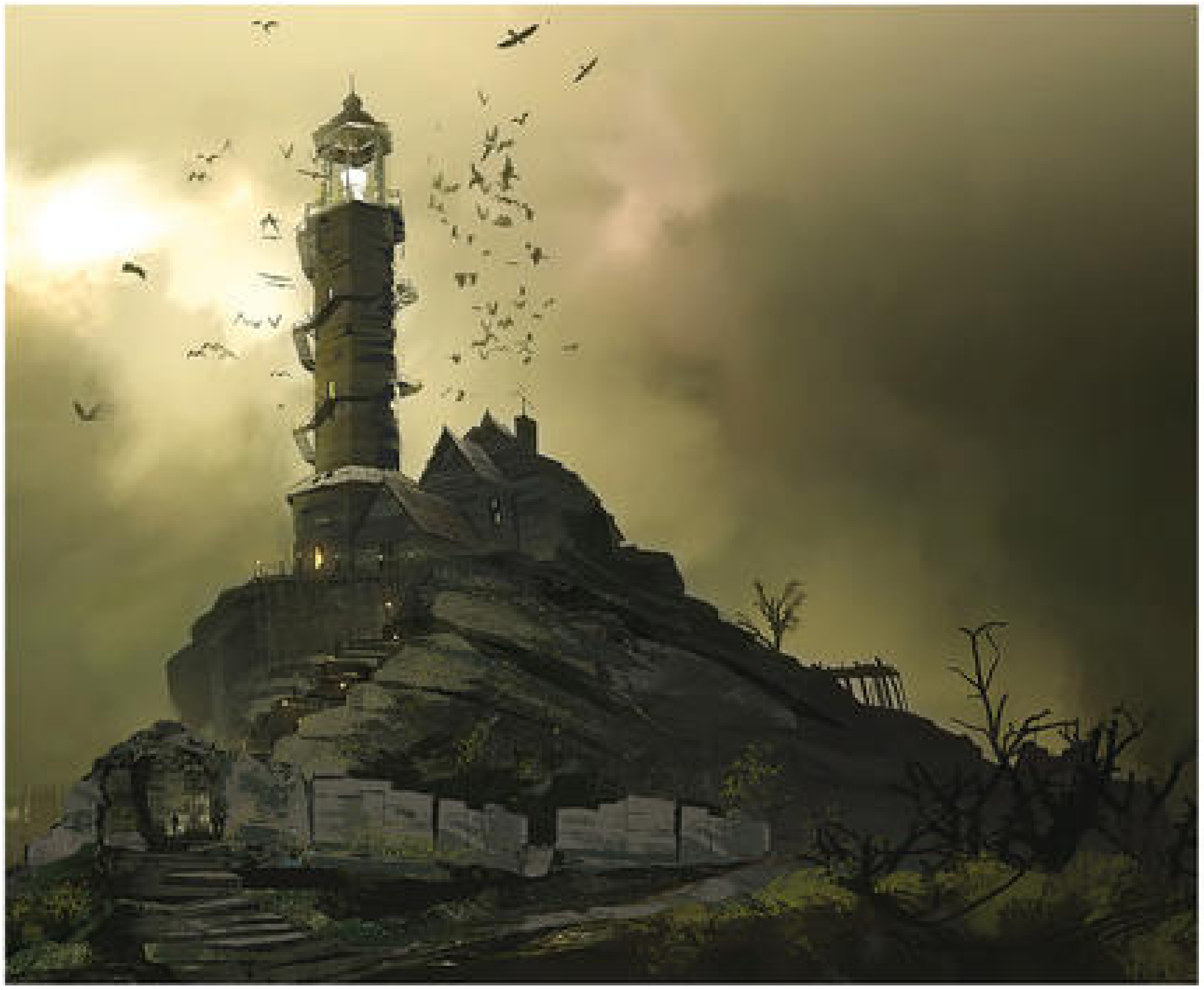


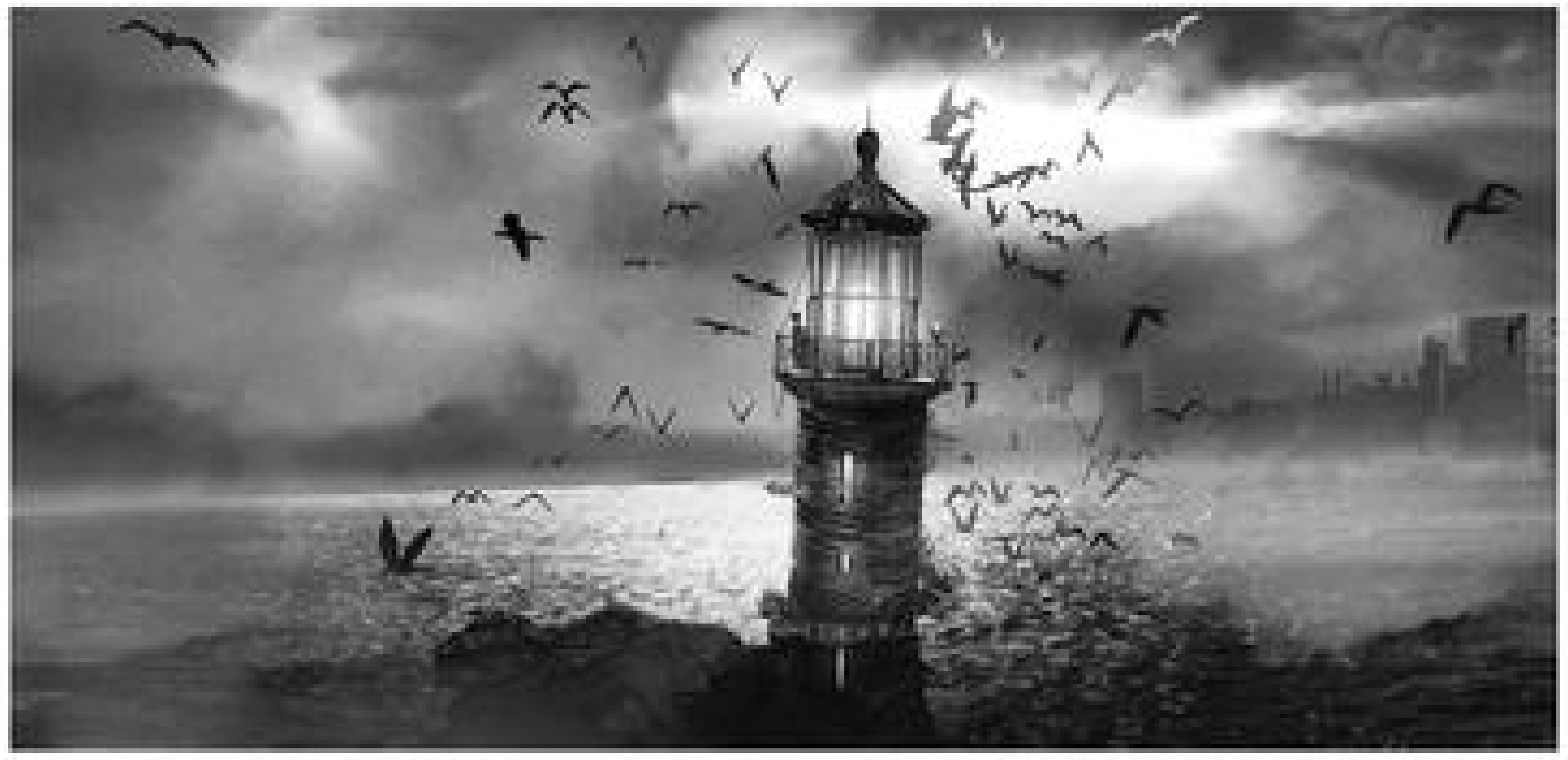
ARTIST JEFF SANGALLI

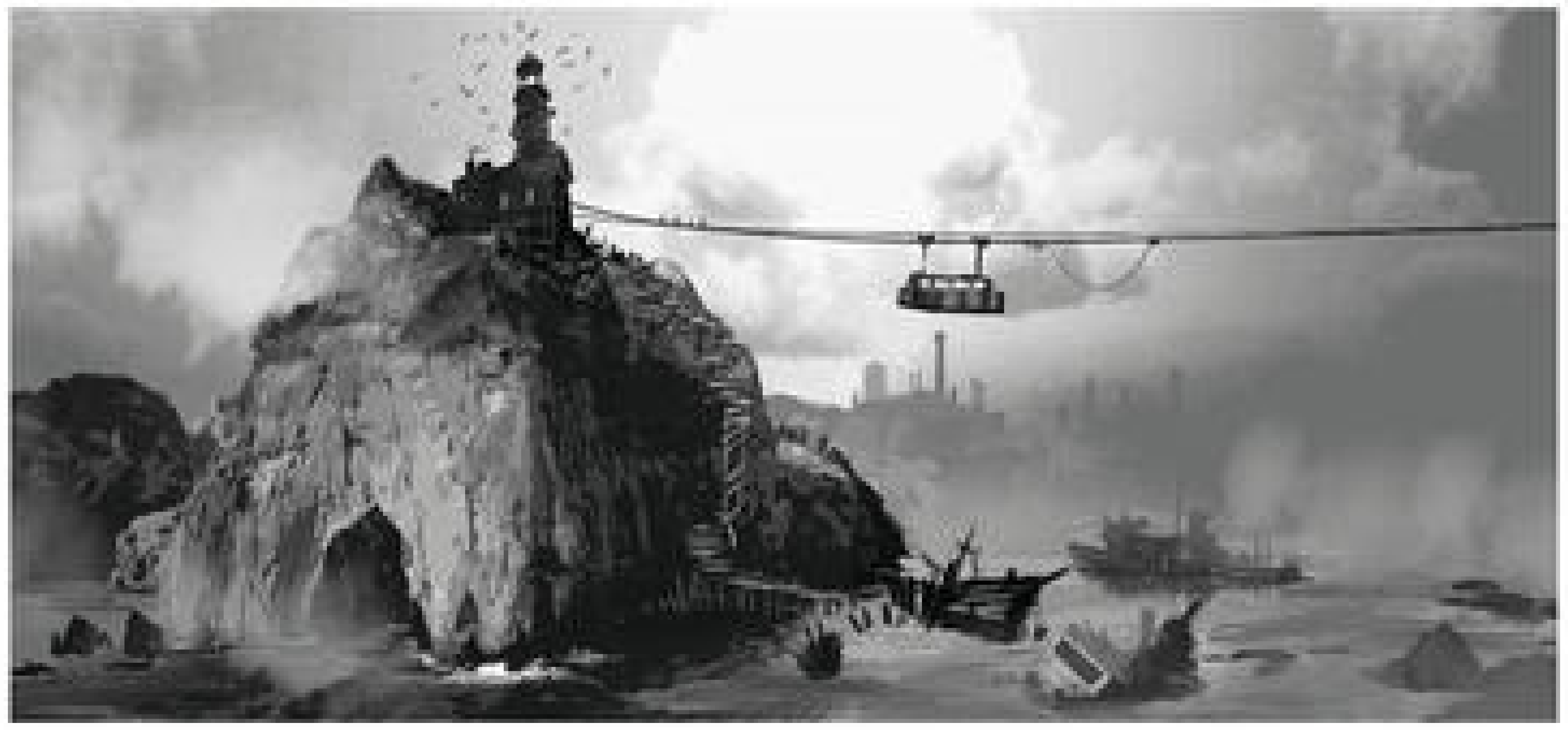


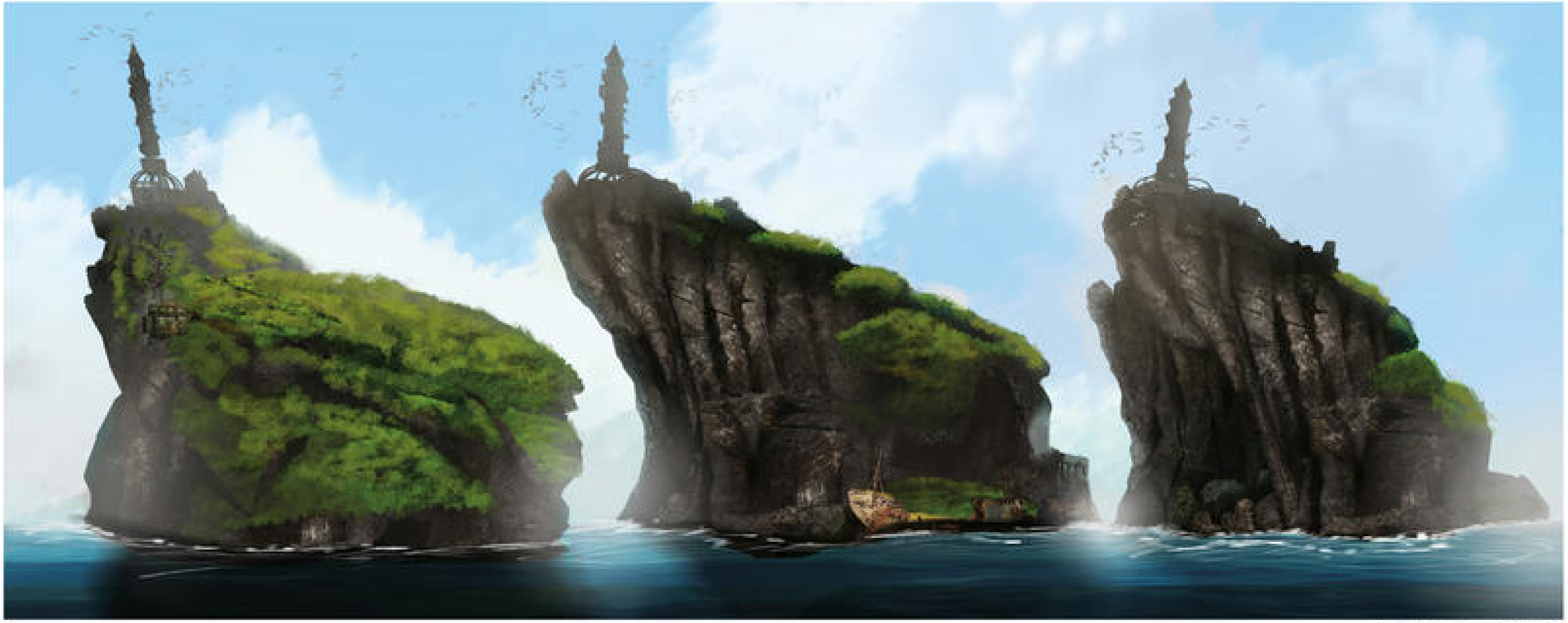
THE LIGHTHOUSE

The imagery that Jeff painted for this location was instrumental in not just guiding the opening section of the game, but also the mood of how we wanted the beginning to feel: mysterious, slightly ominous but also beautiful through its overgrown organic beauty. Jeff always knew he wanted a lighthouse in the world of Denska, and once he started designing it we knew it had to take a prominent place in the level design.



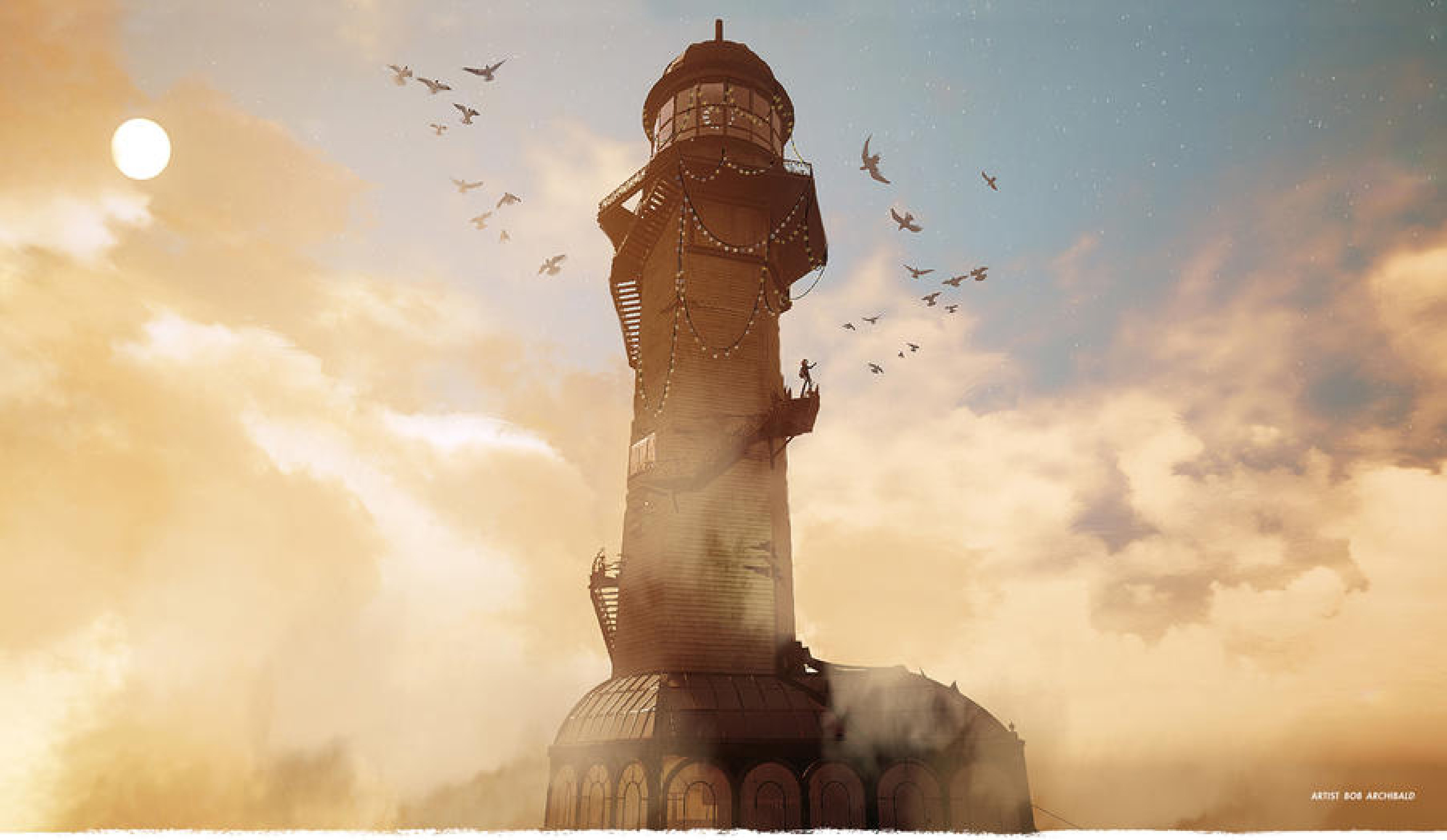




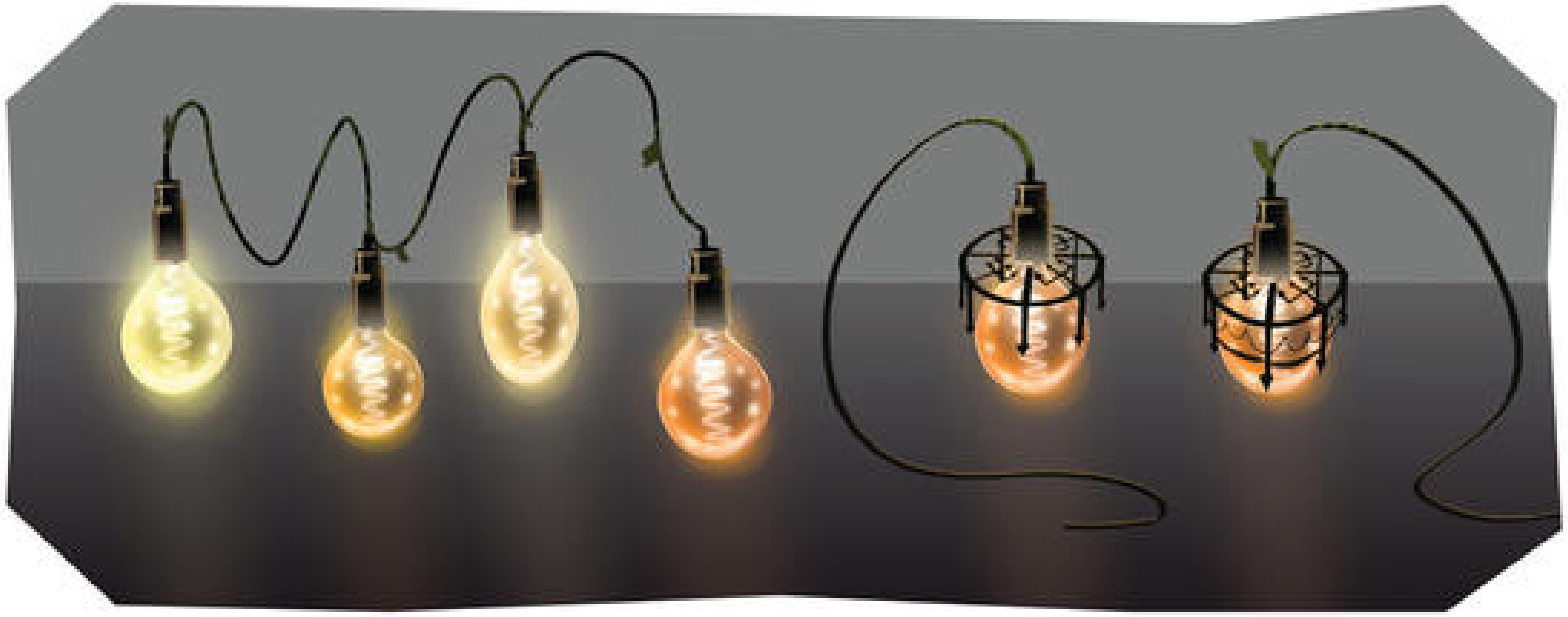


ARTIST JEFF SANGALLI (THIS PAGE)

We had a wide variety of different concepts for the lighthouse island as well as the buildings. It was the incorporation of the atrium into the main building that really finalized the design of the main building.



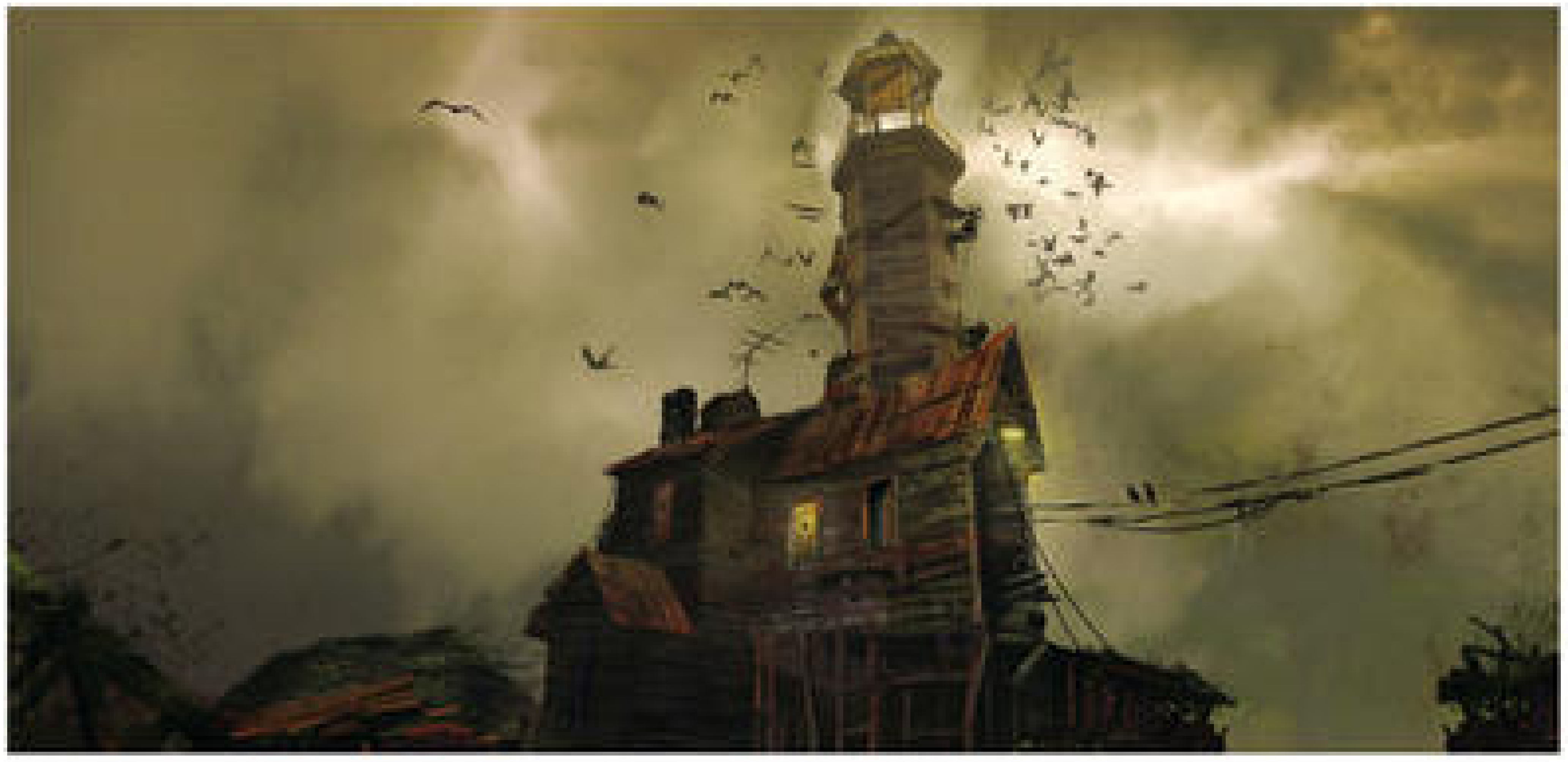
ARTIST BOB ARCHIBALD

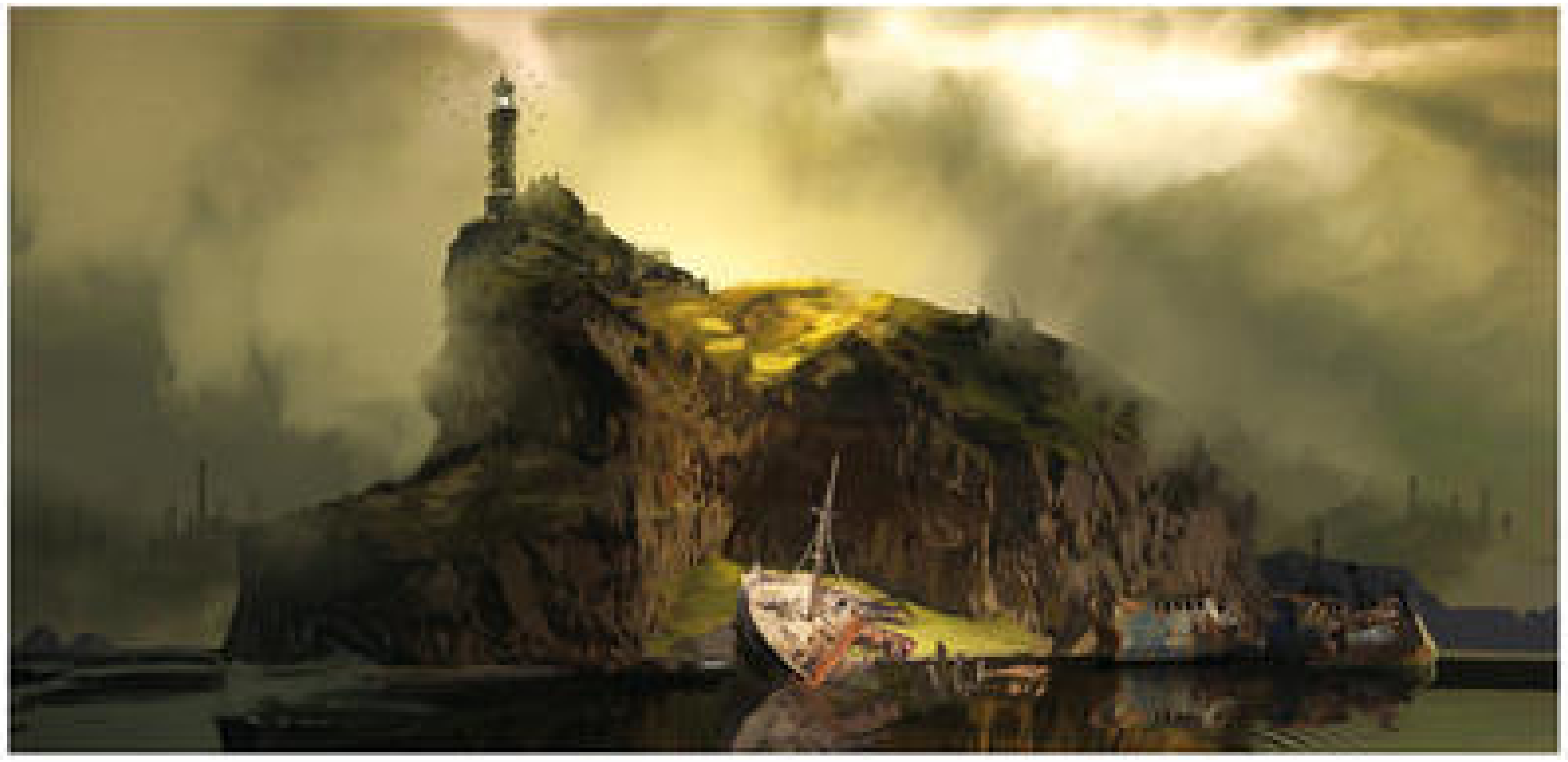


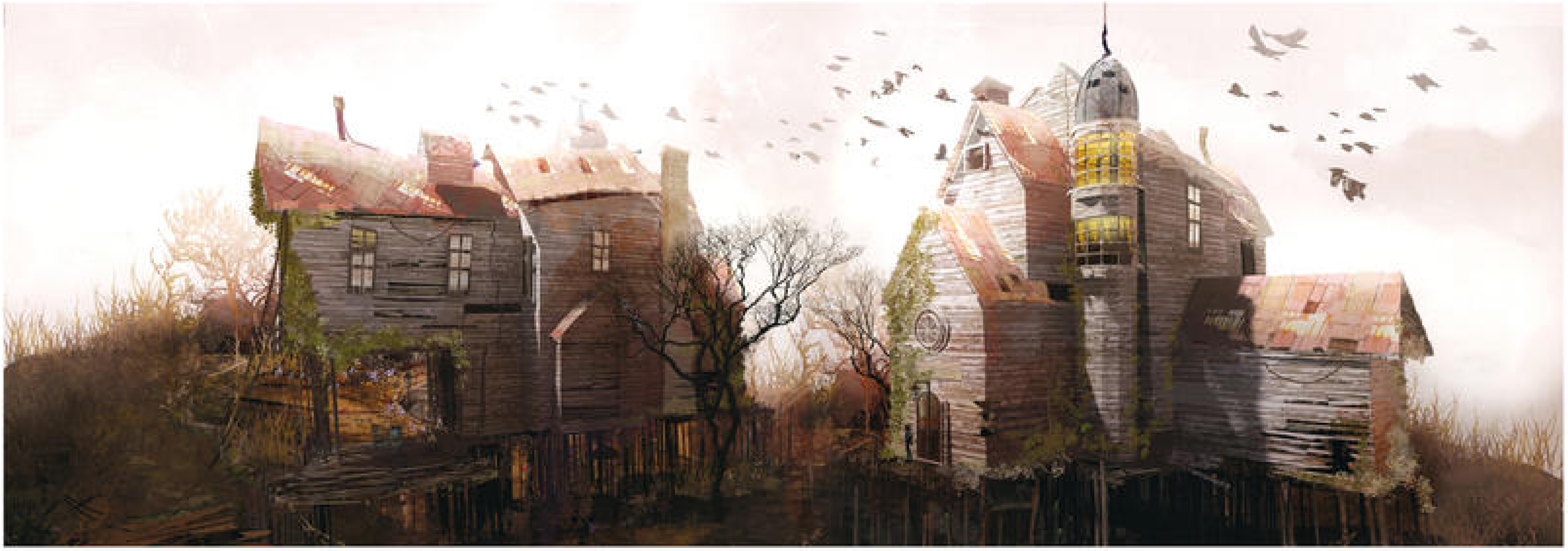
AMBIENT LIGHT

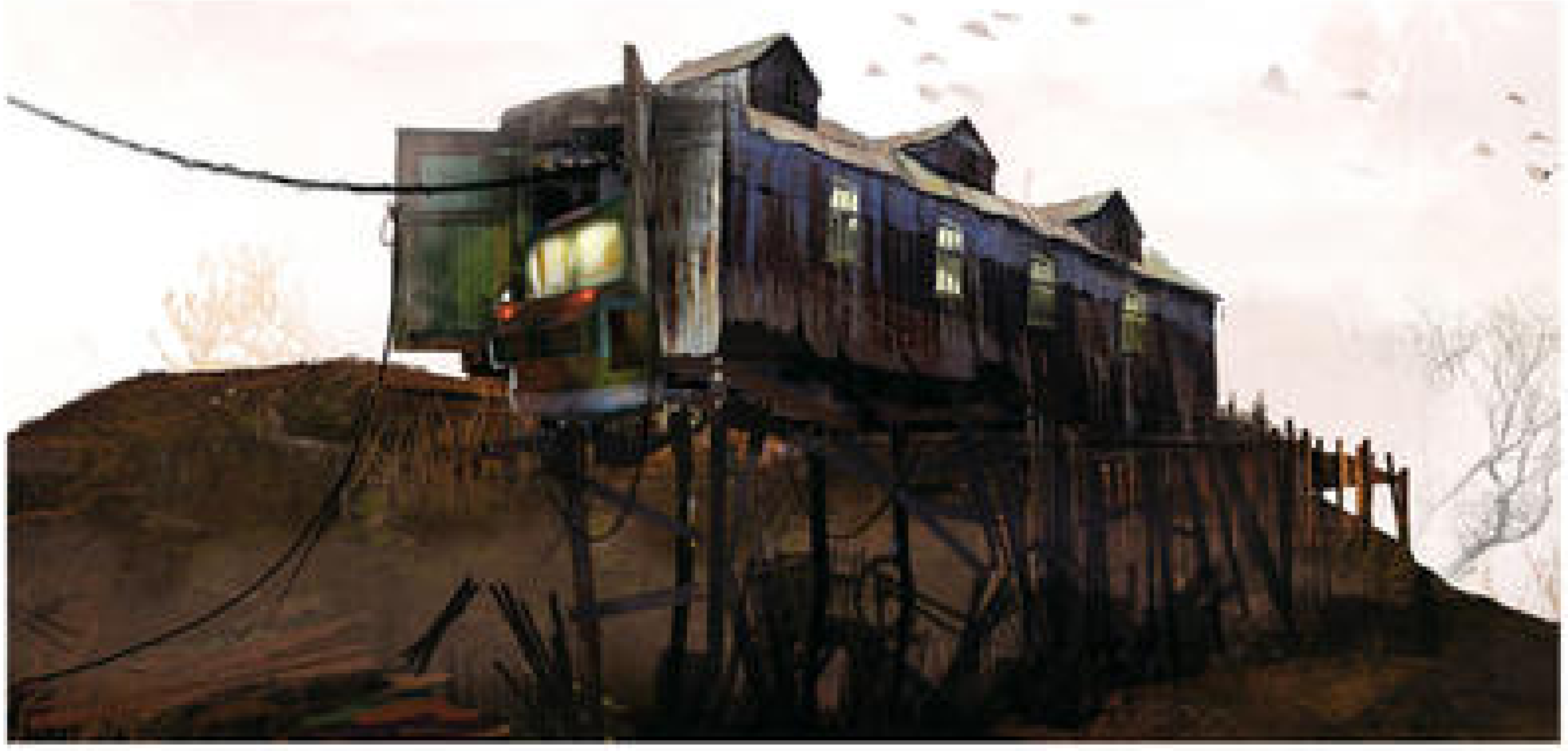
The lights in the game arrived a little later in the level development as we explored generous ways to encourage the player to paint in the levels. Each level's lightbulbs are unique, with tiny details that you might not see unless you look very carefully. The lighthouse ones for example have nautical themed metal work around the top.

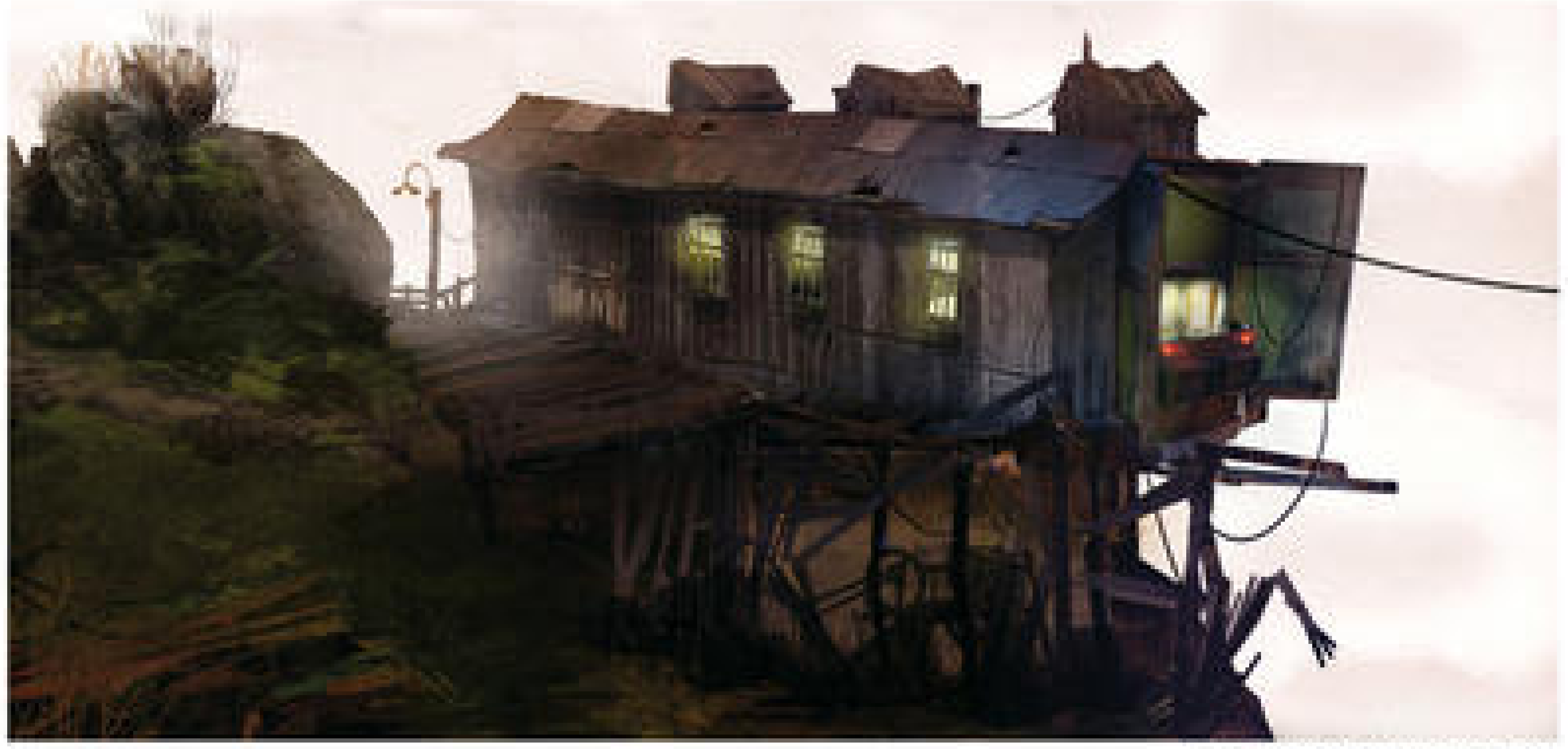
ARTIST JEFF SANGALLI





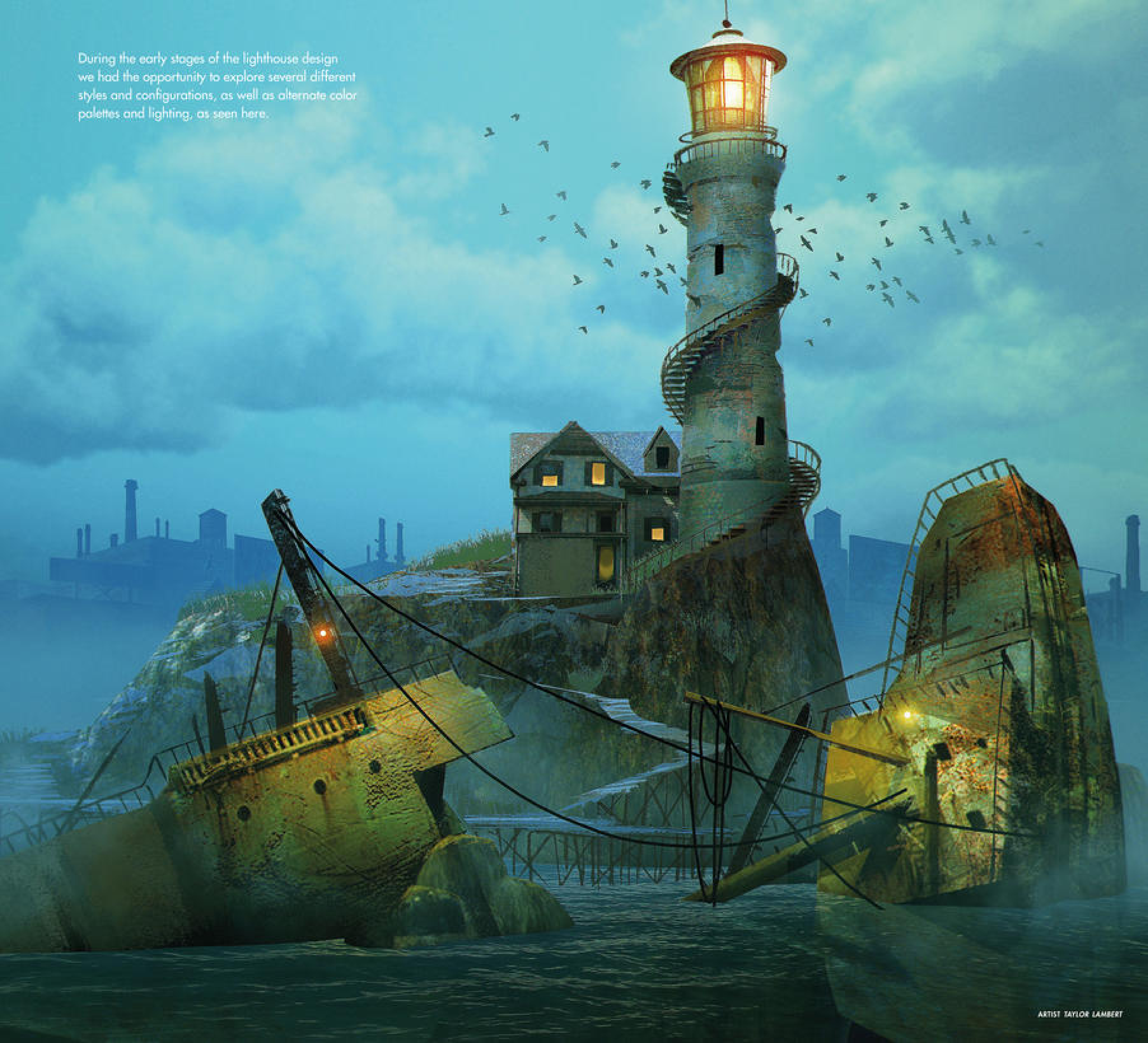






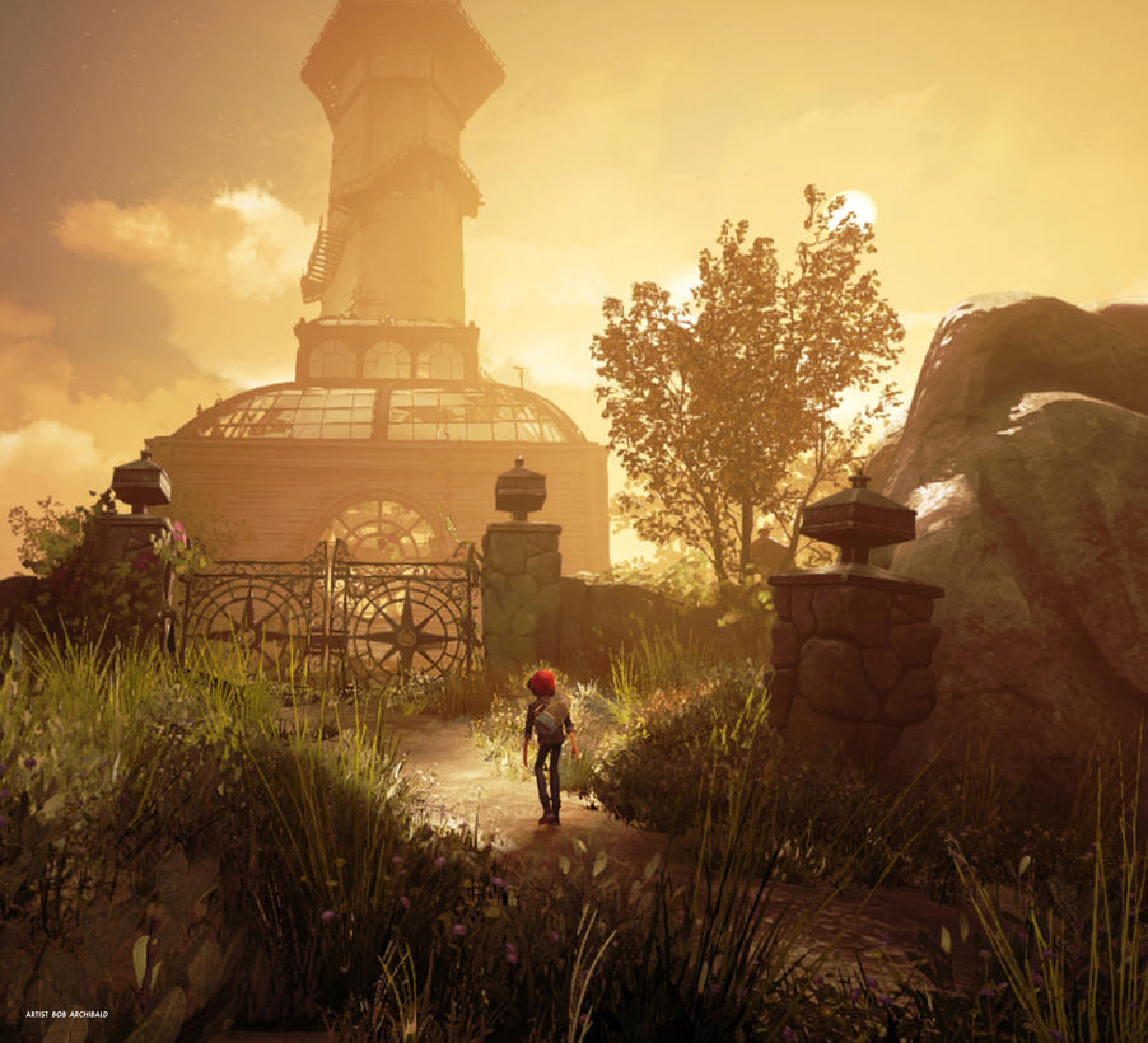
ARTIST JEFF SANGALLI (THIS PAGE)

At one point, as we developed the location, we thought we might need more interior space for level design purposes, but ultimately it was not needed. We were going to leave them in the location but didn't want to frustrate players by not letting them explore it, so we took it out.

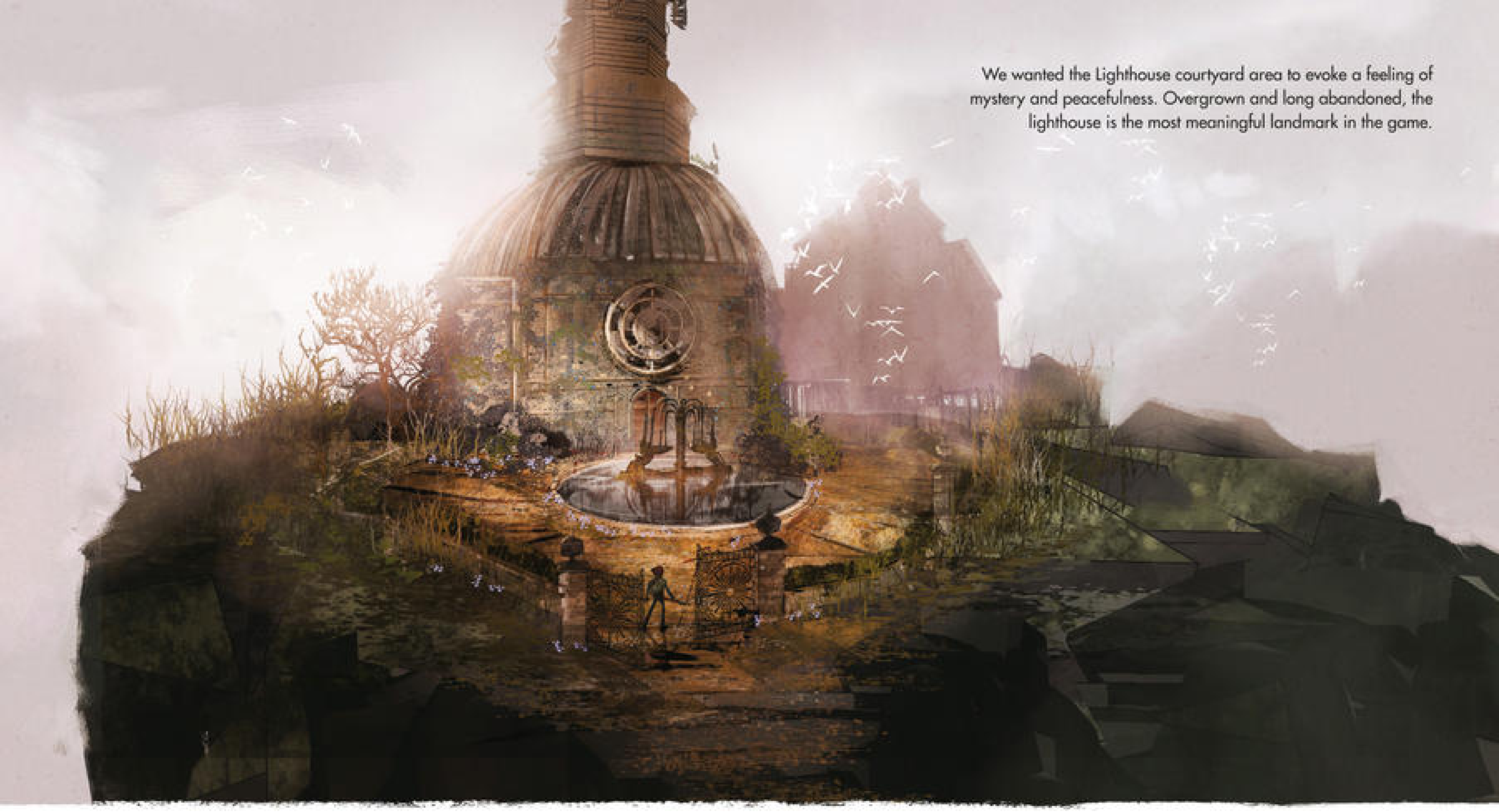


During the early stages of the lighthouse design we had the opportunity to explore several different styles and configurations, as well as alternate color palettes and lighting, as seen here.

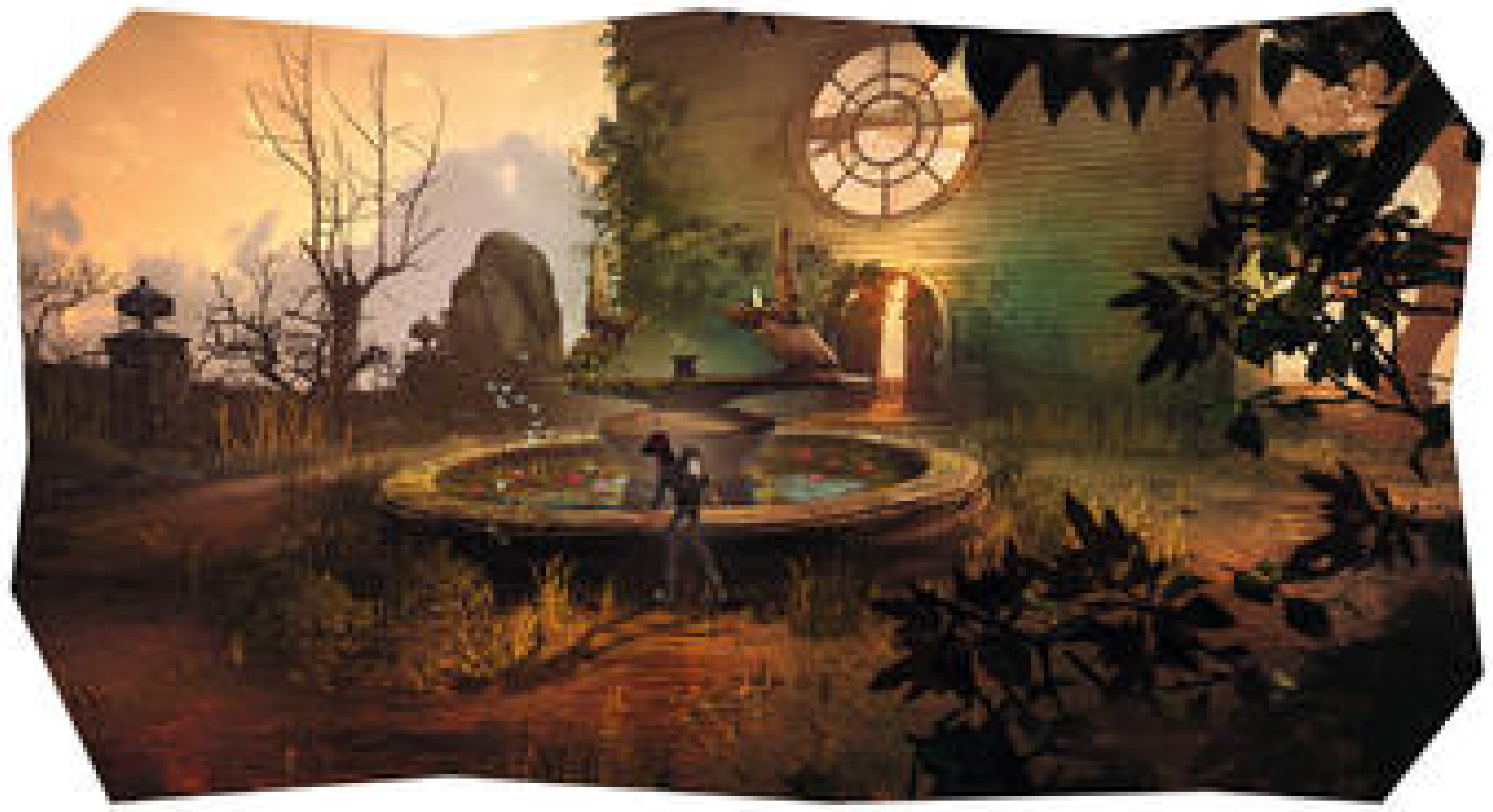
ARTIST *TAYLOR LAMBERT*



ARTIST *BOB ARCHIBALD*

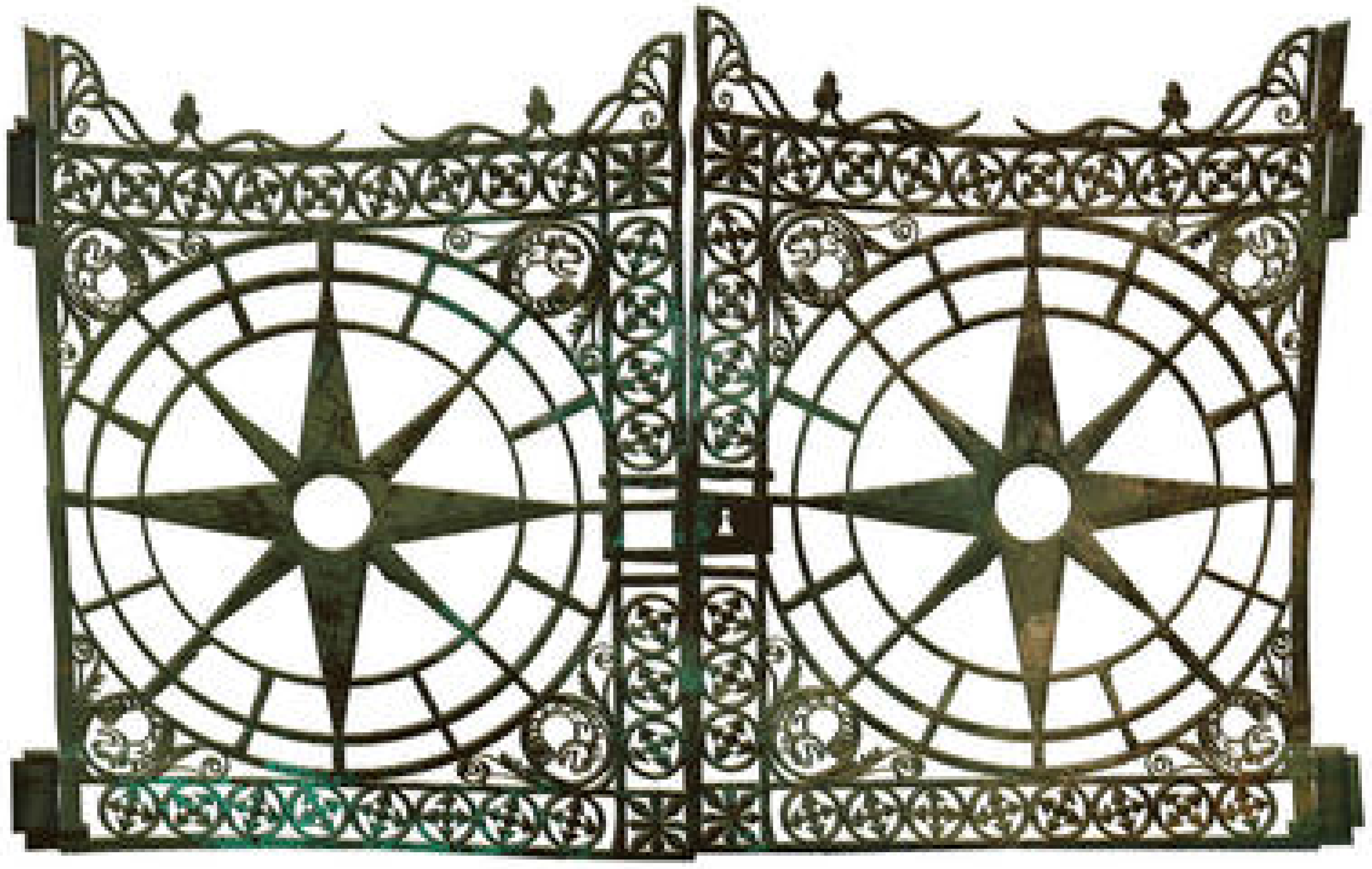


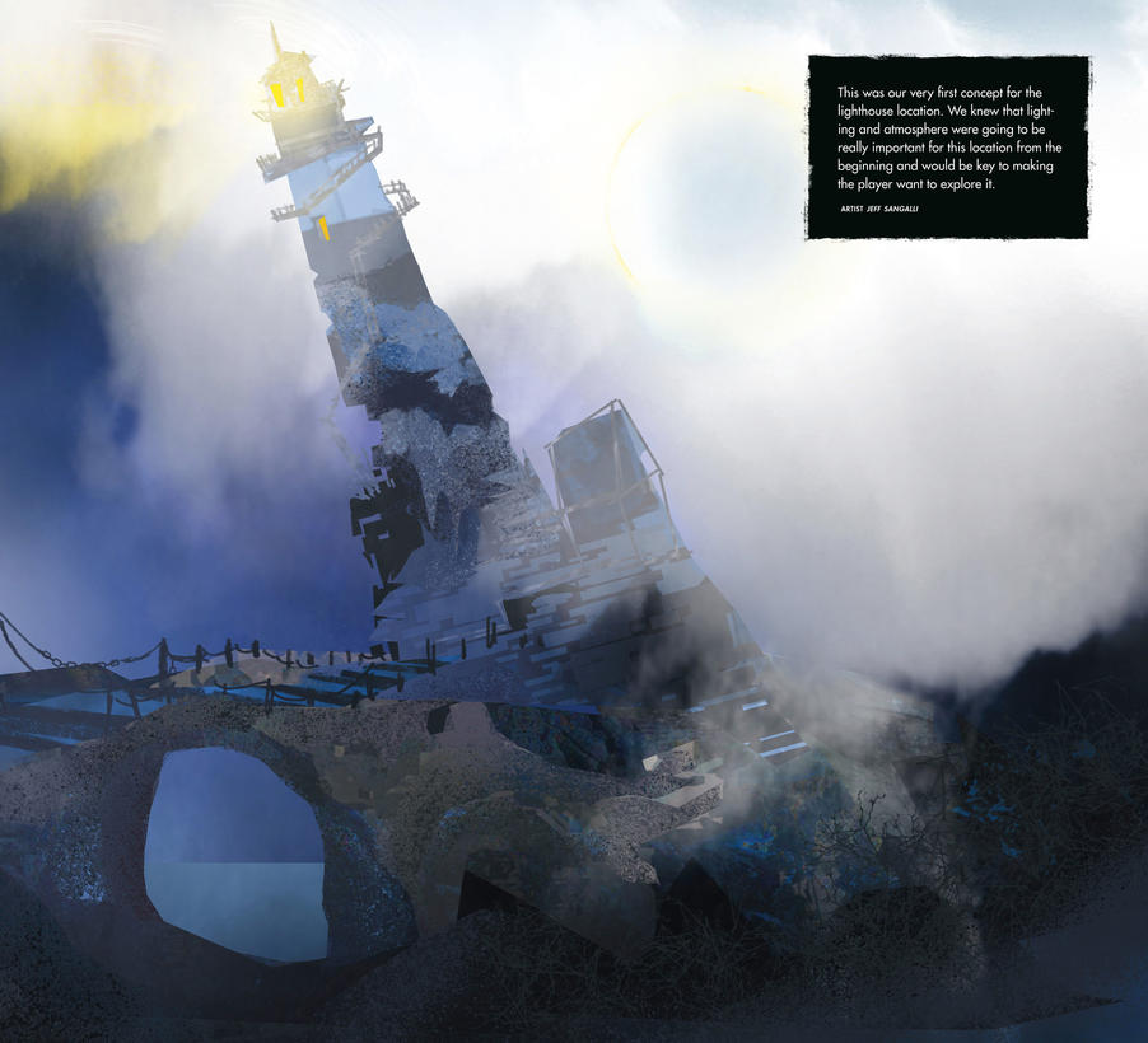
We wanted the Lighthouse courtyard area to evoke a feeling of mystery and peacefulness. Overgrown and long abandoned, the lighthouse is the most meaningful landmark in the game.



The repetition of circles in this area (the main window, the gate, and the fountain) is meant to represent harmony and serenity.

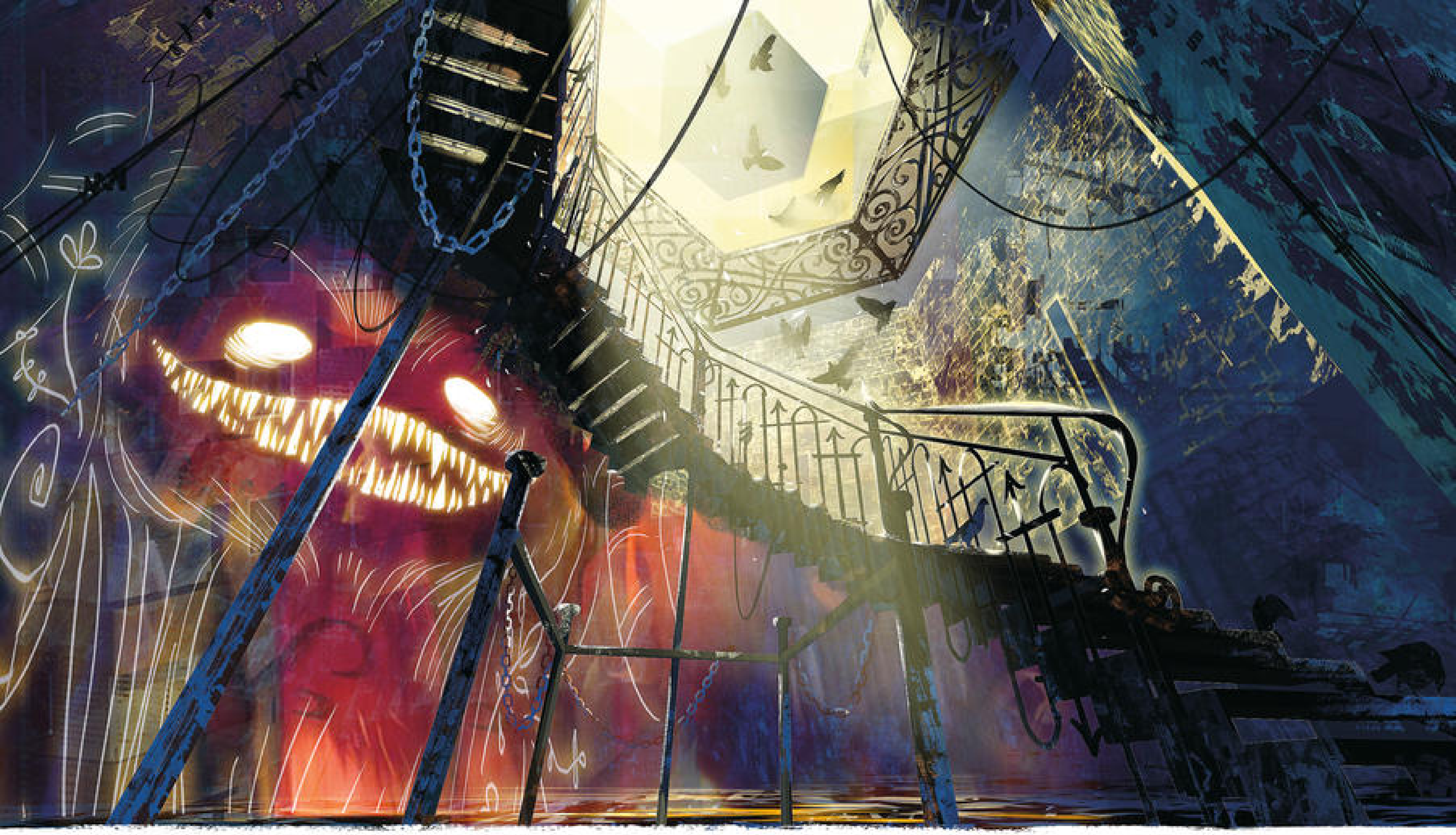
ARTIST JEFF SANGALLI (THIS PAGE)





This was our very first concept for the lighthouse location. We knew that lighting and atmosphere were going to be really important for this location from the beginning and would be key to making the player want to explore it.

ARTIST *JEFF SANGALLI*

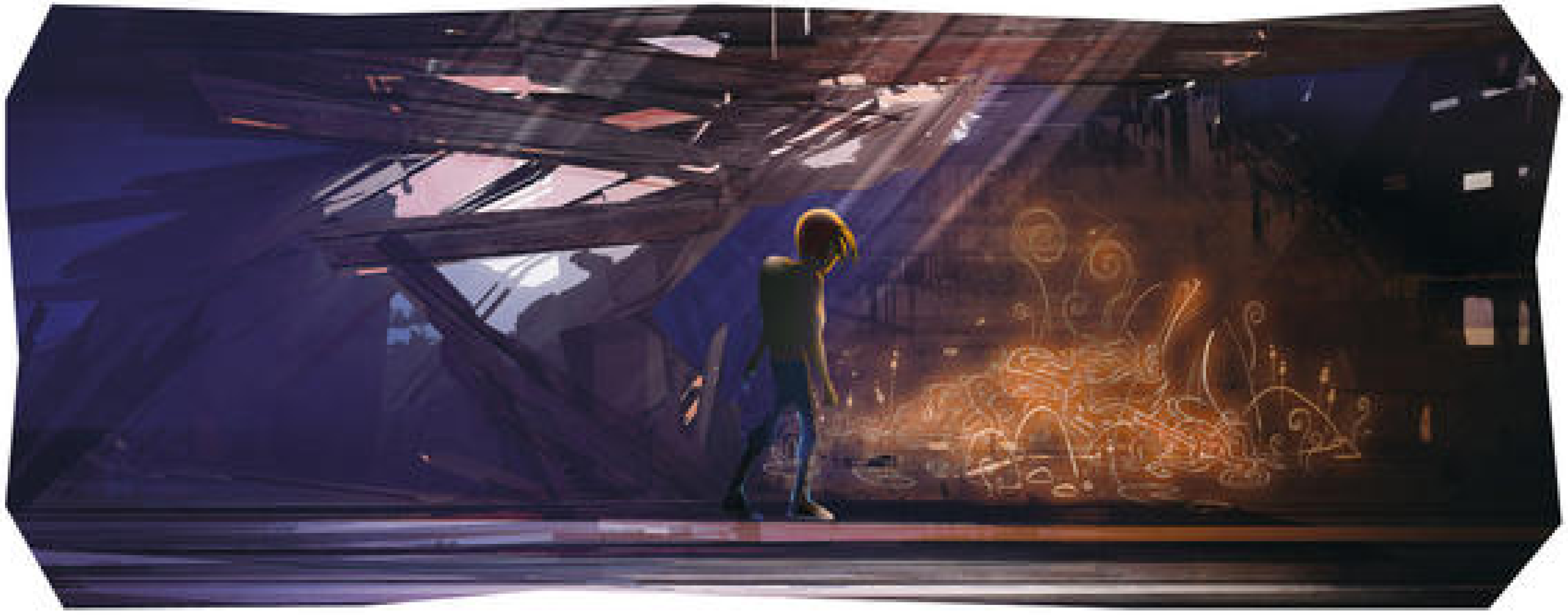


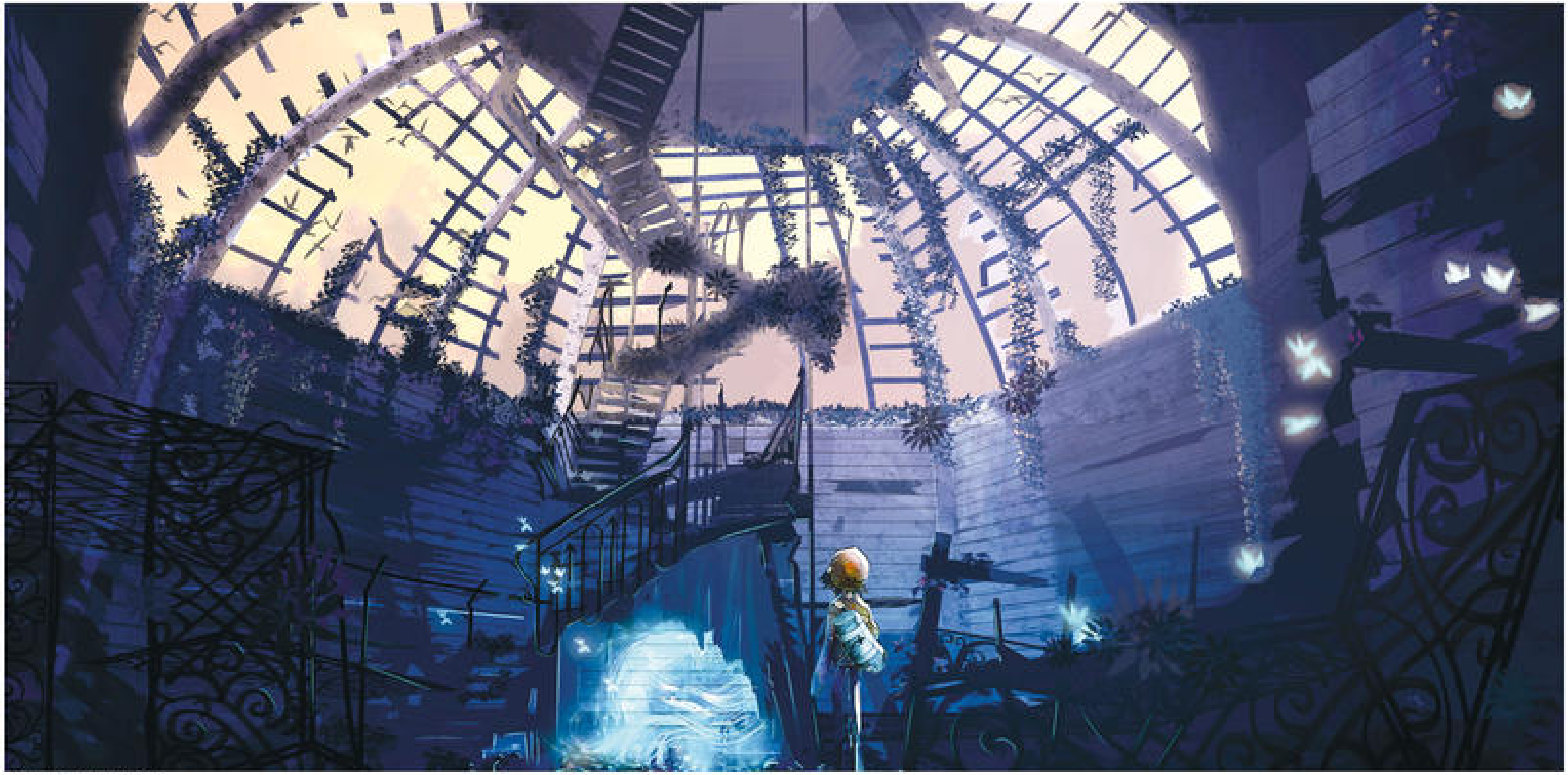
INTERIOR

This was the first set of concepts for meeting Luna. We were going for dramatic silhouettes to highlight the first time you meet her.

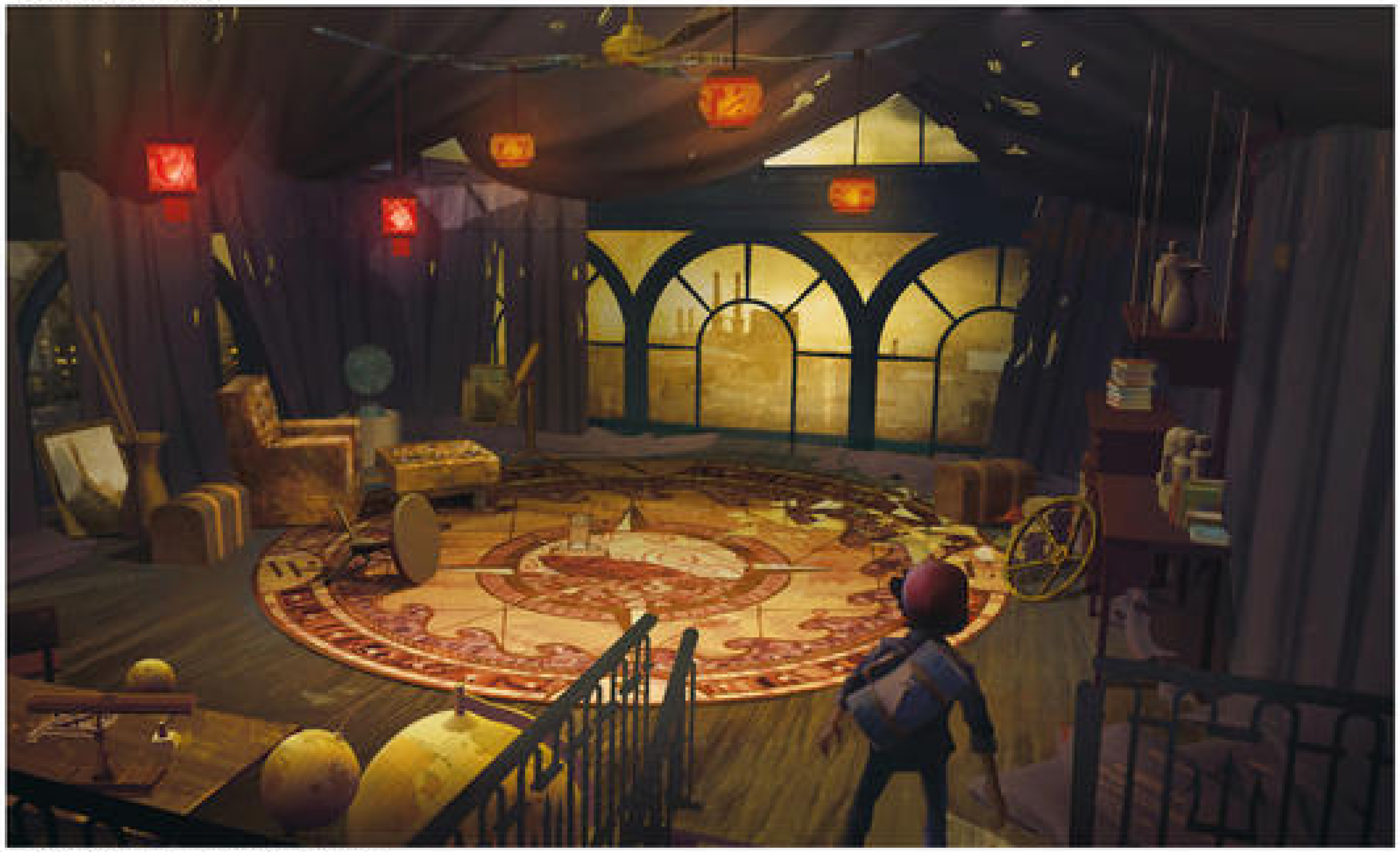
The lighthouse interior was designed with three areas in mind: the basement, where Ash discovers Luna and the magic brush, the atrium where Ash paints with Luna, and the map room where Ash learns of his purpose.

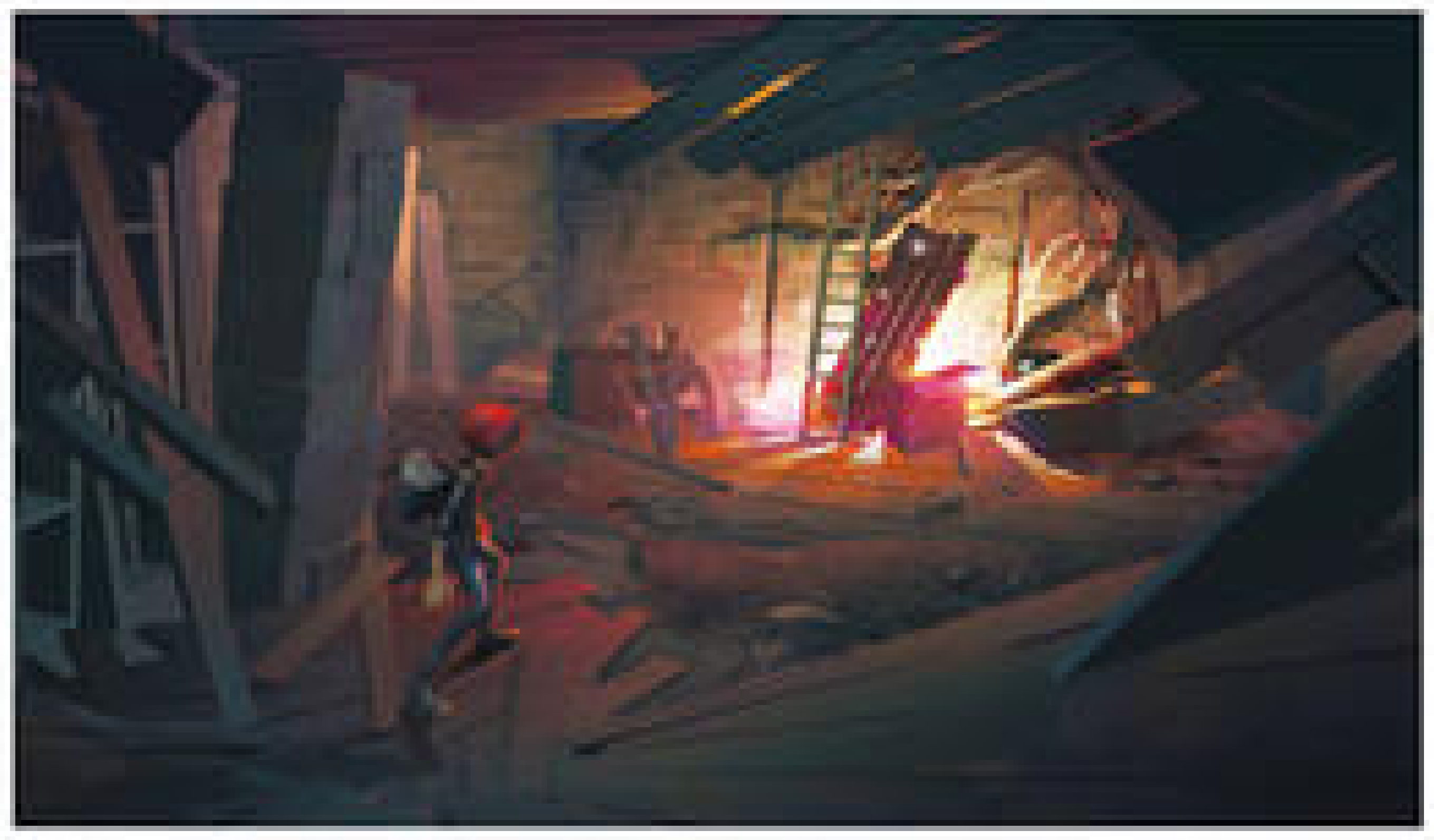
ARTIST *JEFF SANGALLI (THIS PAGE)*

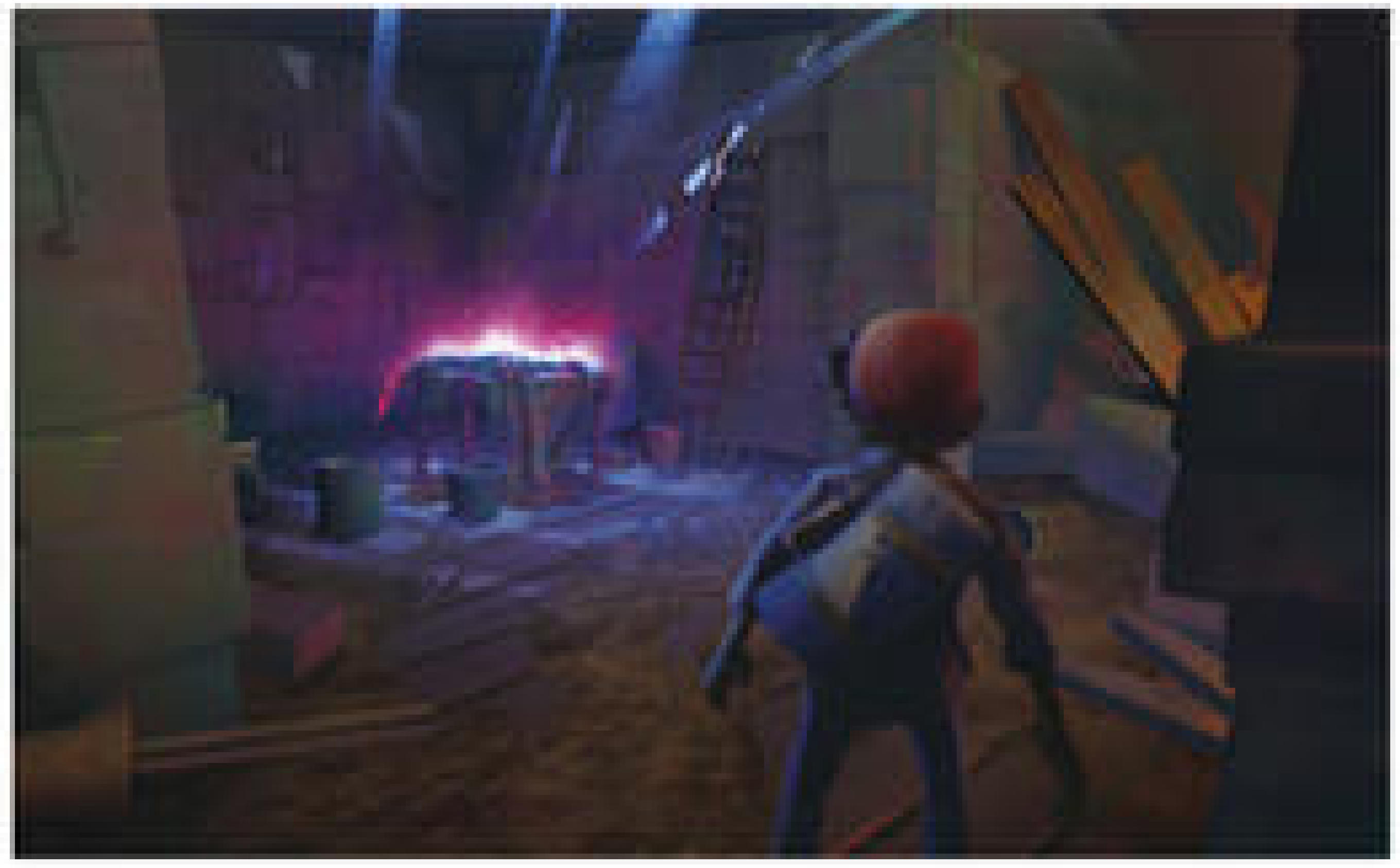




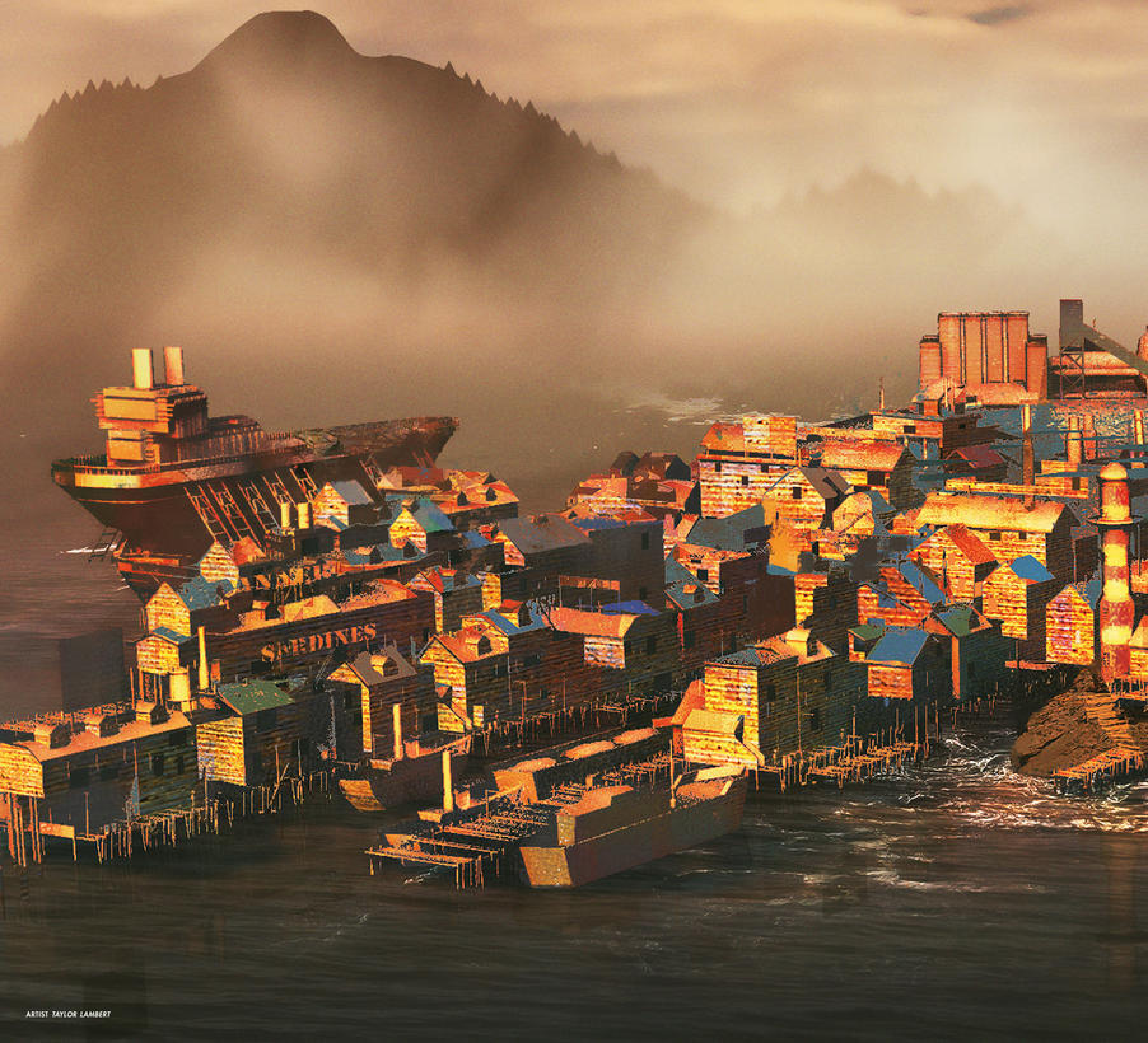
ARTIST JEFF SANGALLI (TOP)



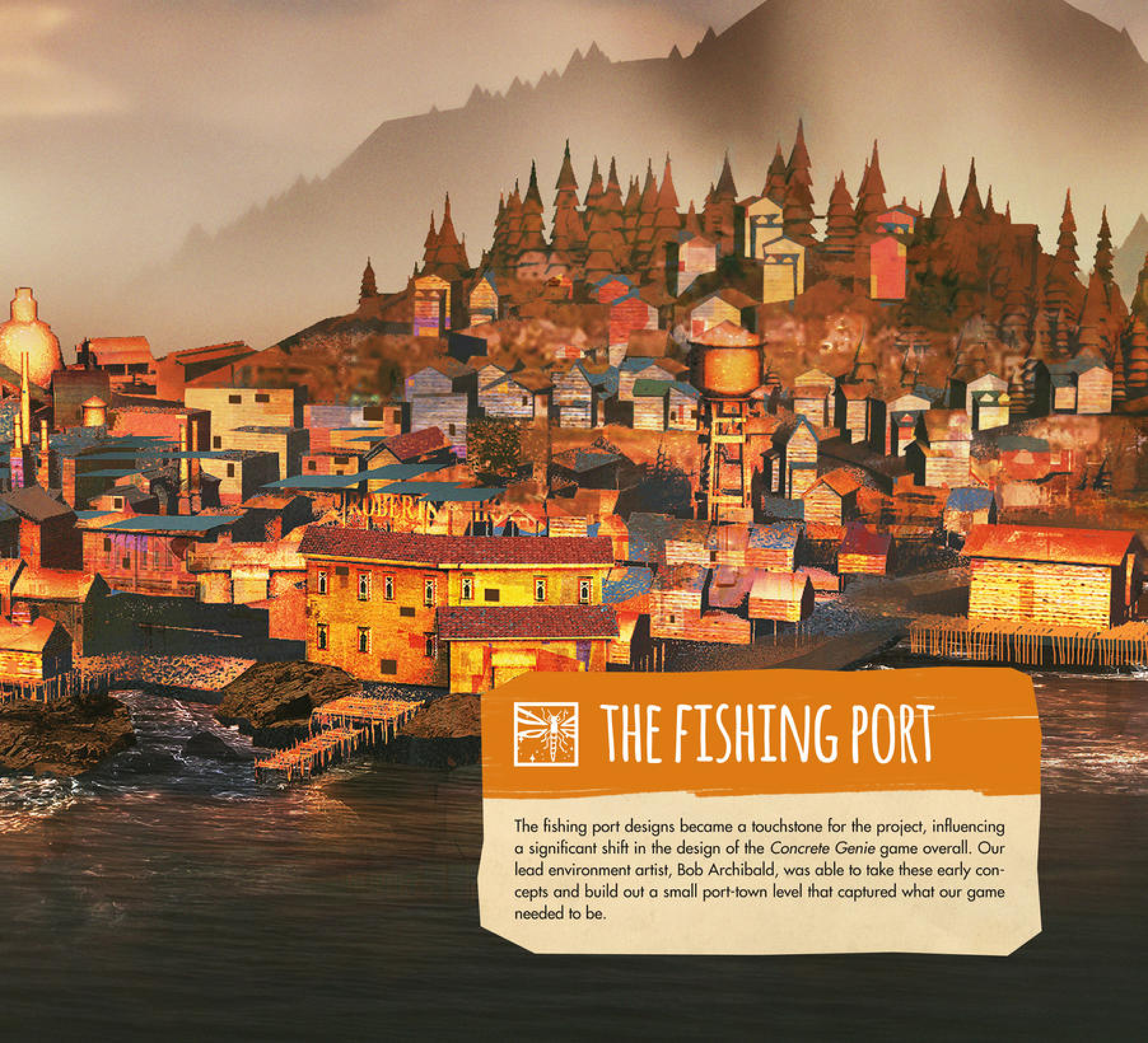




ARTIST TAYLOR LAMBERT (BOTTOM LEFT AND RIGHT)

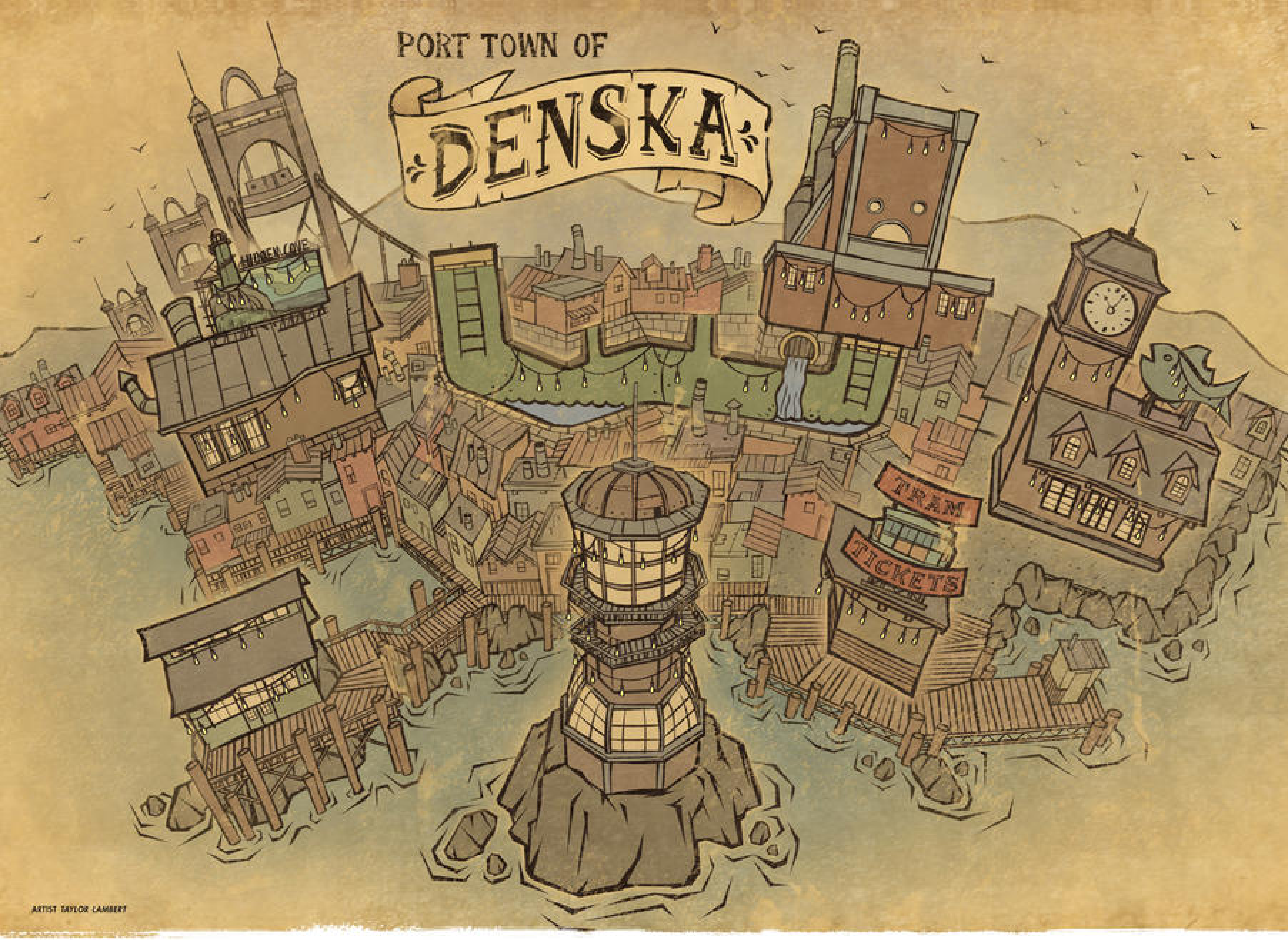


ARTIST *TAYLOR LAMBERT*



THE FISHING PORT

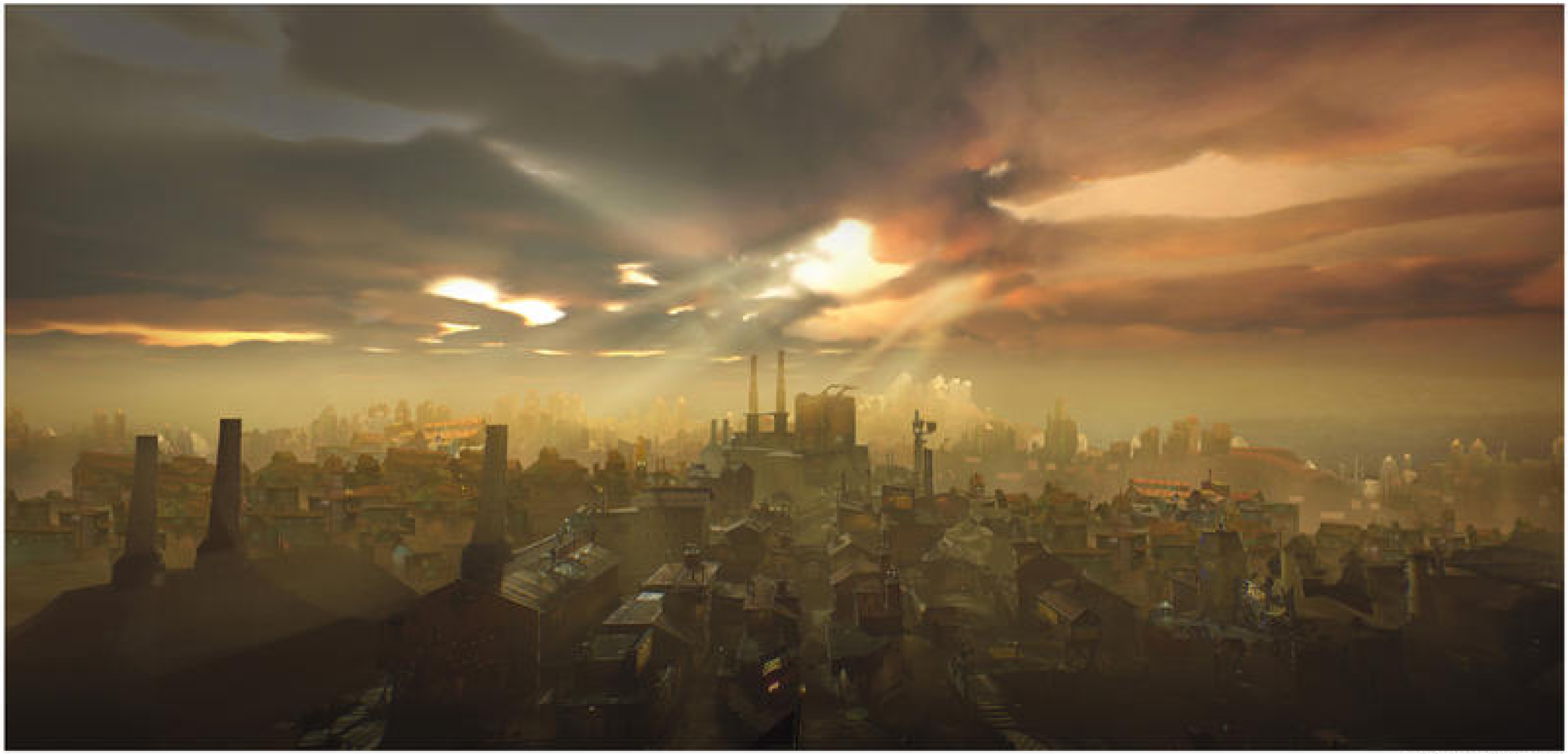
The fishing port designs became a touchstone for the project, influencing a significant shift in the design of the *Concrete Genie* game overall. Our lead environment artist, Bob Archibald, was able to take these early concepts and build out a small port-town level that captured what our game needed to be.


PORT TOWN OF
DENSKA
HIDDEN COVE
TRAM
TICKETS

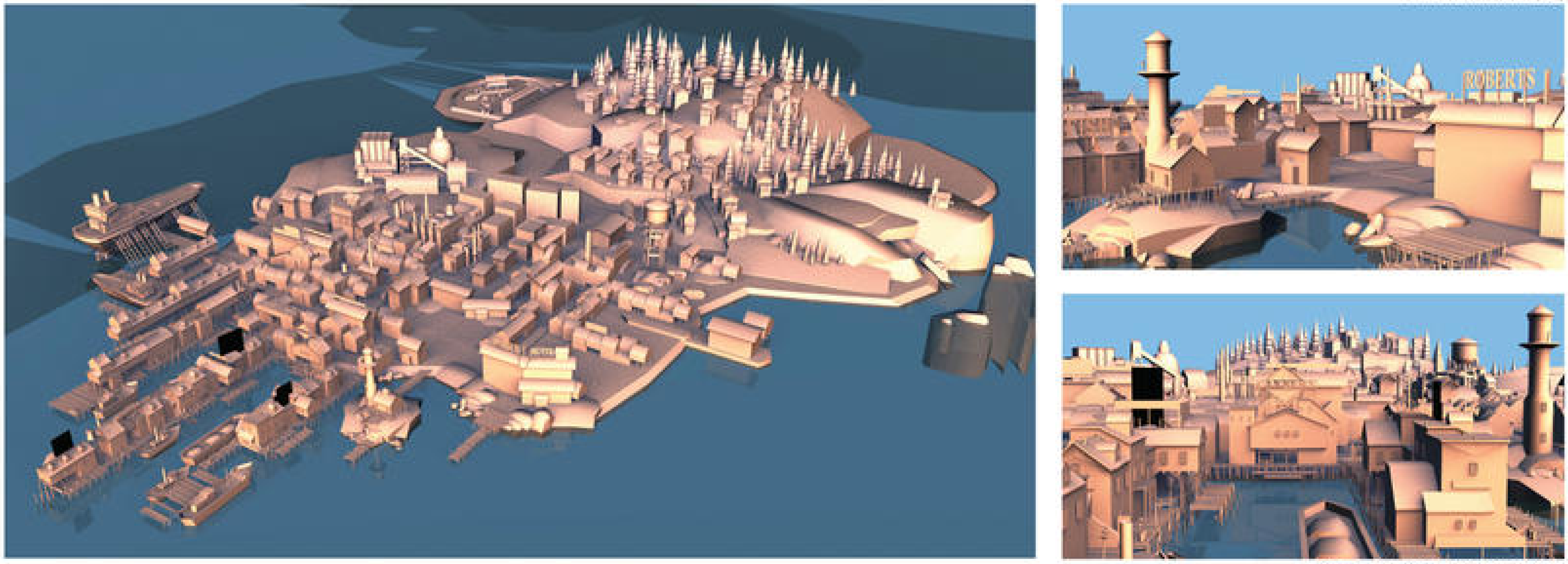
ARTIST TAYLOR LAMBERT

DENSKA

This map became a key piece of imagery as it helps the player, and Ash, know the different areas (and levels) in the game and keep track of their progress in painting it back to life. We made several revisions to showcase the different areas in a clear but still stylized way.



ARTIST JEFF SANGALLI (TOP)

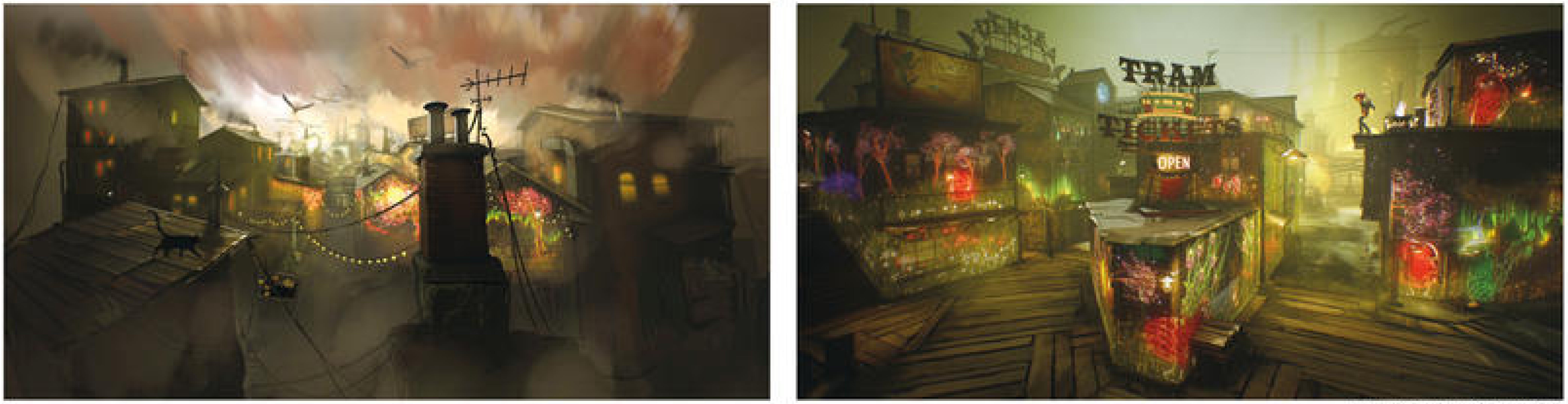


ARTISTS JEFF SANGALLI AND TAYLOR LAMBERT

Built out of simple 3D shapes, these fishing-port proxy models allowed our artists to quickly create several iterations of environment concepts that helped establish the look and scale of the Denska world.

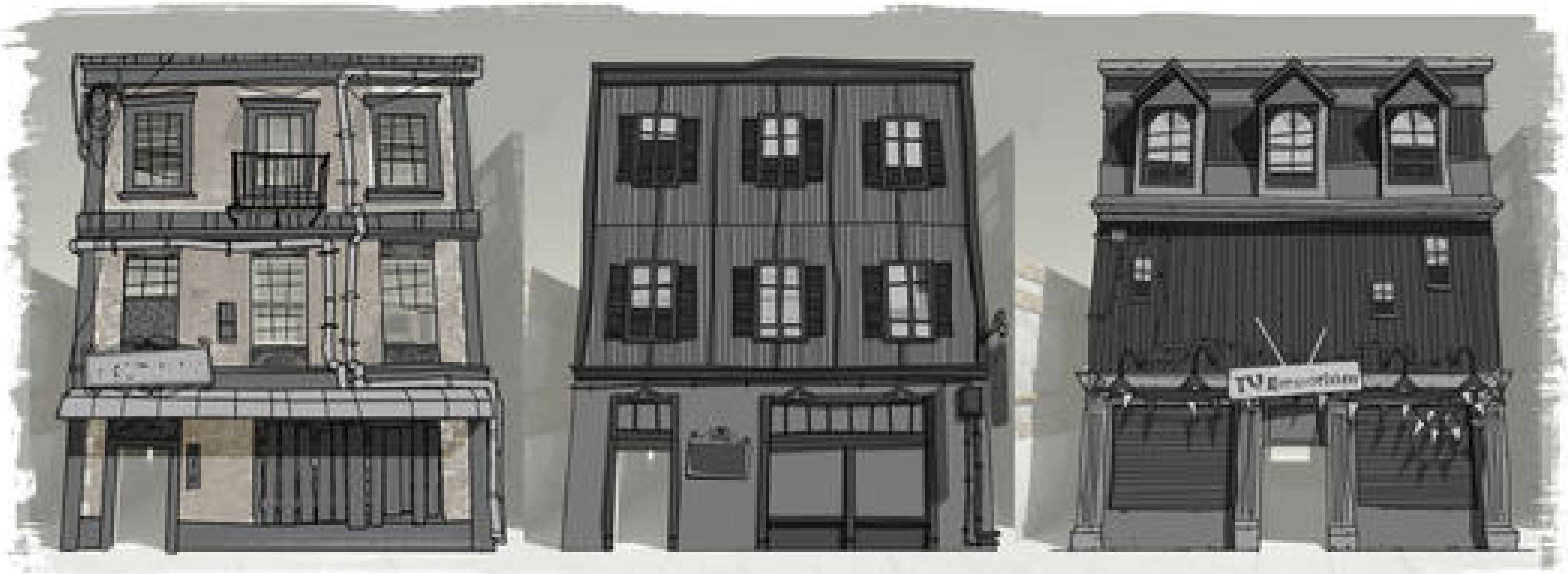
This is a great example of Bob Archibald's amazing environment-modeling talent as this piece is almost entirely a screenshot.

ARTIST *BOB ARCHIBALD*



ARTIST *JEFF SANGALLI (LEFT AND RIGHT)*

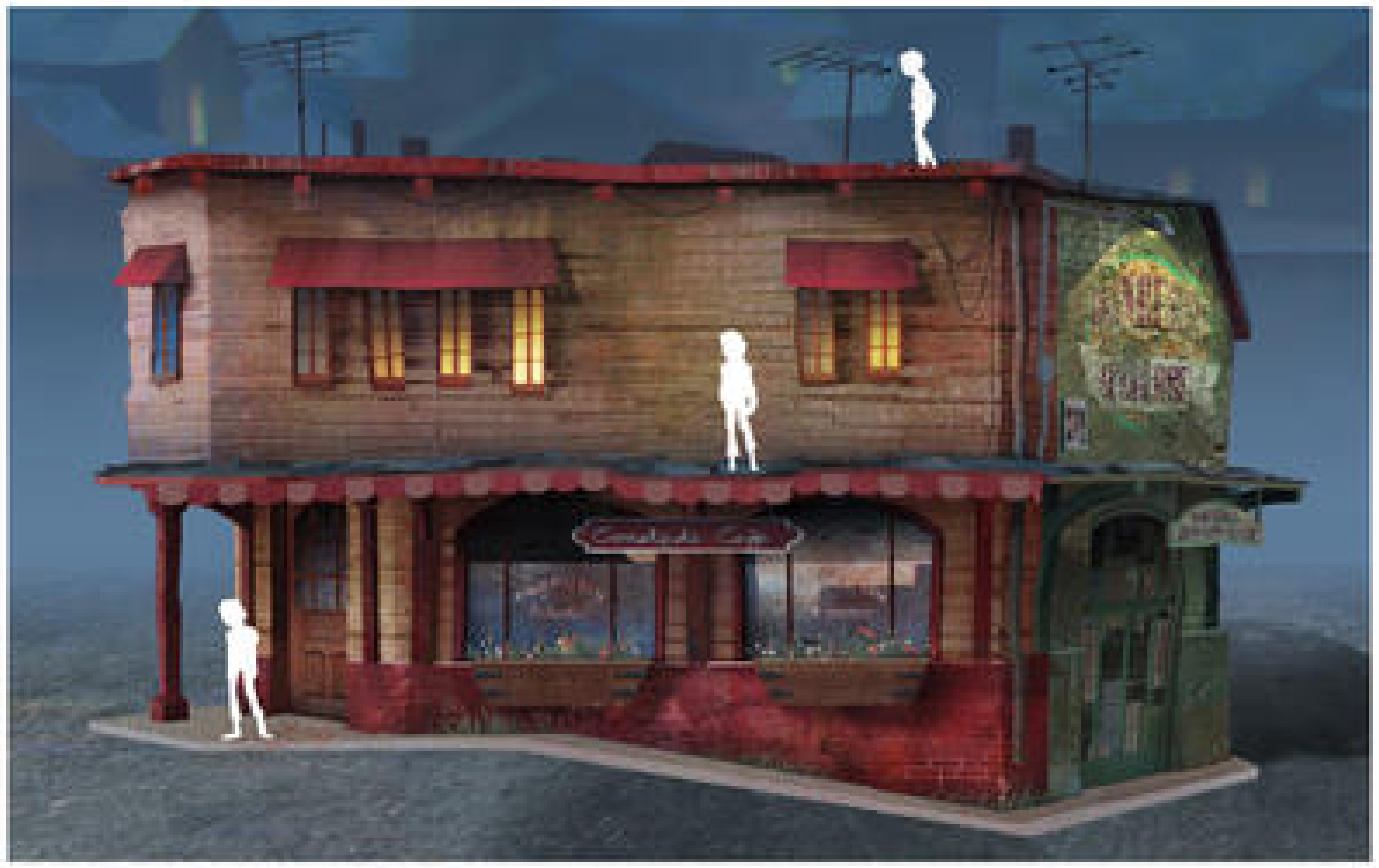
The fishing port of Denska was built in a way to make the rooftops of the world inviting for the player to climb on, explore, and discover new places to paint.

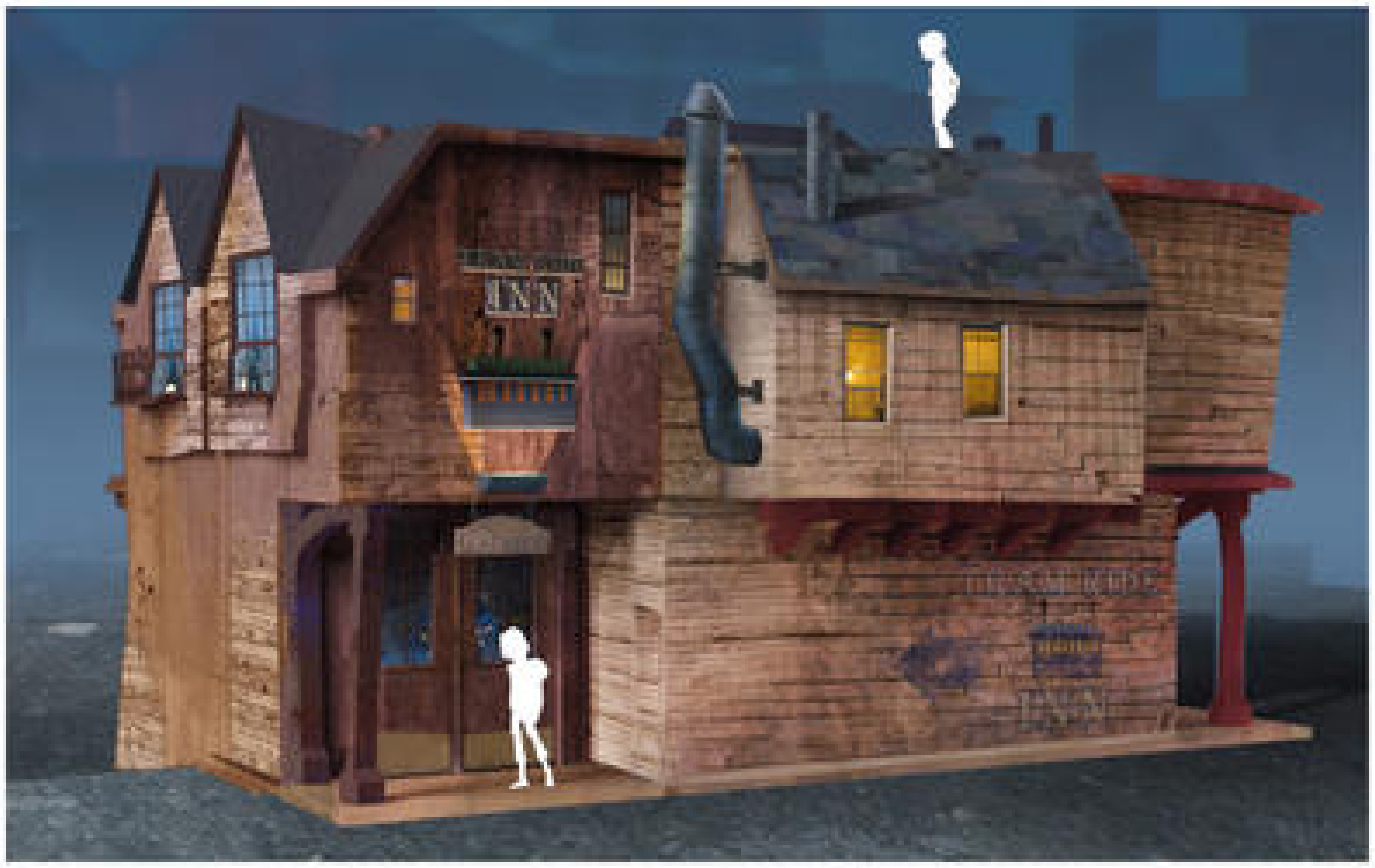


BUILDINGS

Giving our buildings a sense of character, a "wonkiness," was a vital part of the design process. We wanted our sets to feel handcrafted and unique.

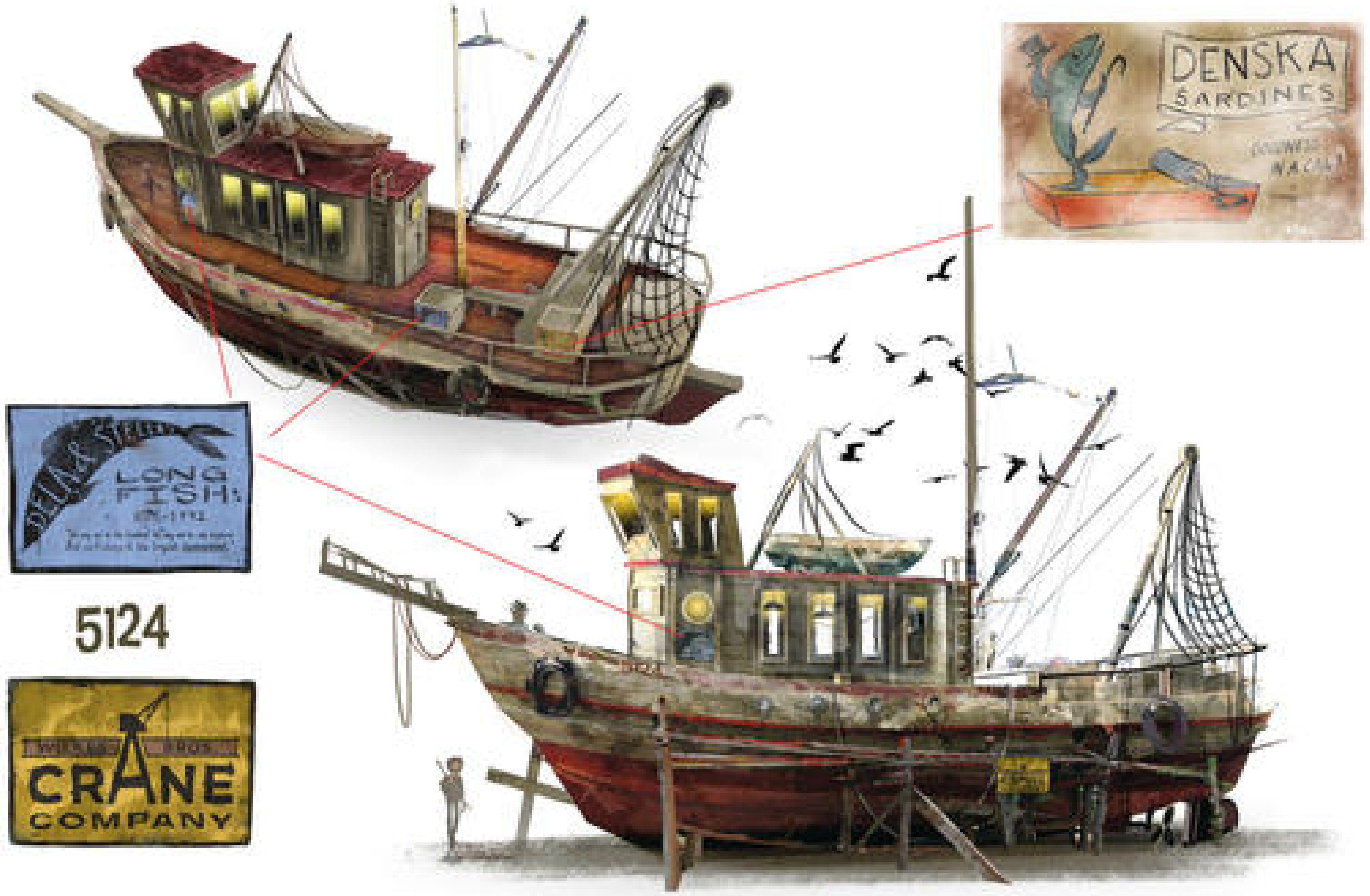
ARTIST TAYLOR LAMBERT (THIS PAGE)

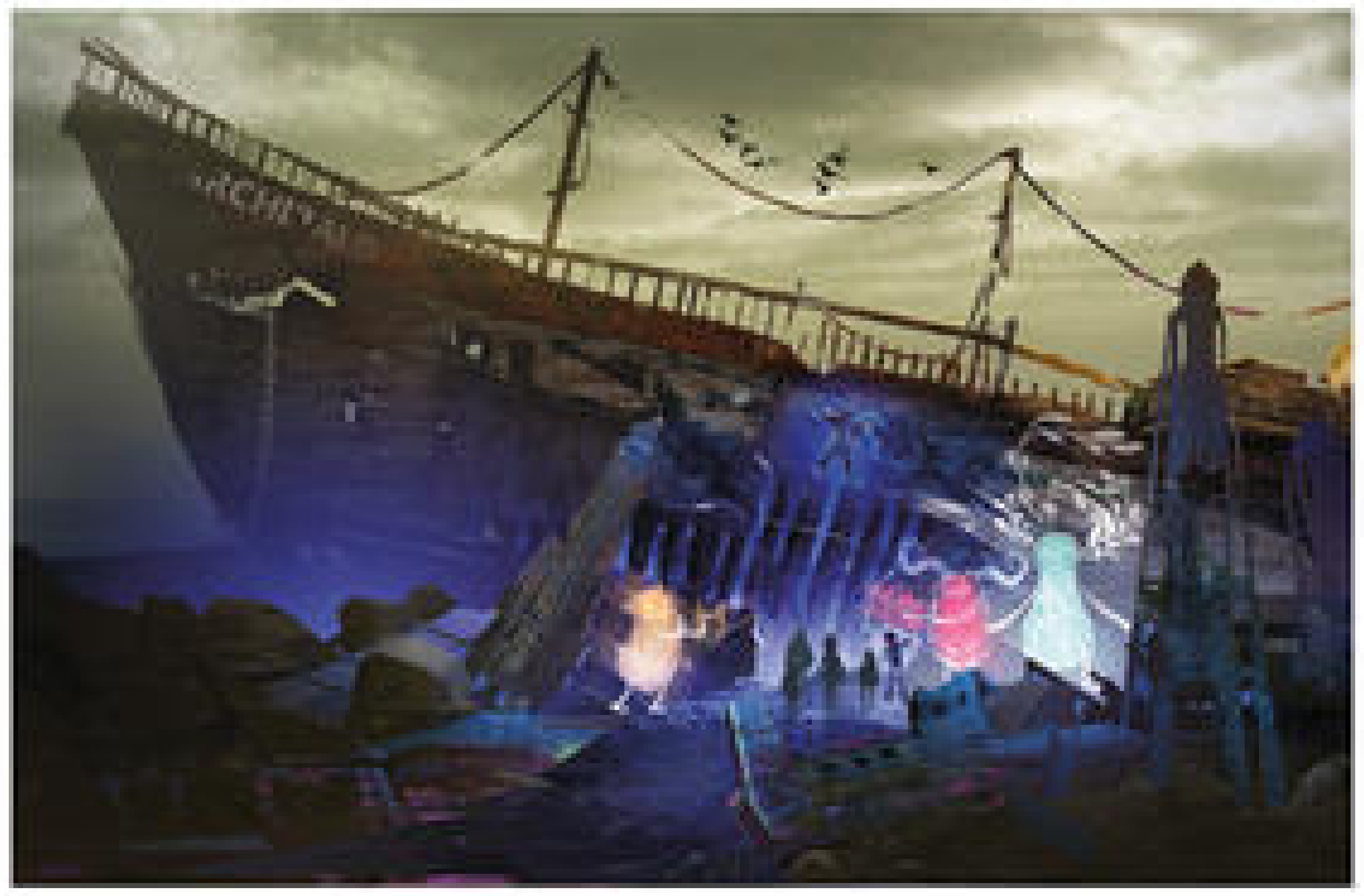


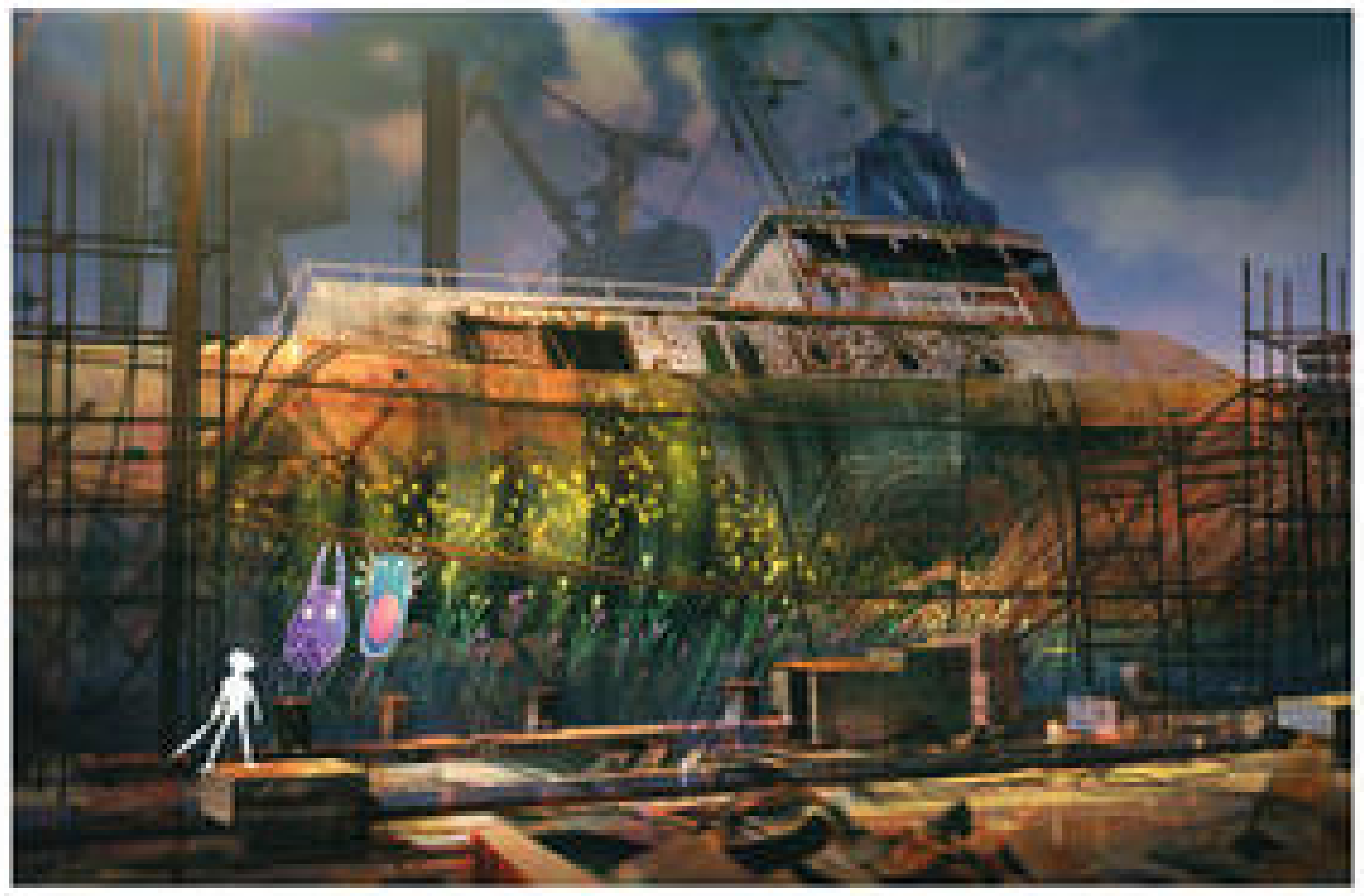


The boatyard level was an early level design that was ultimately cut, but we used elements from it during the entrance to the cave and beach in the final level.

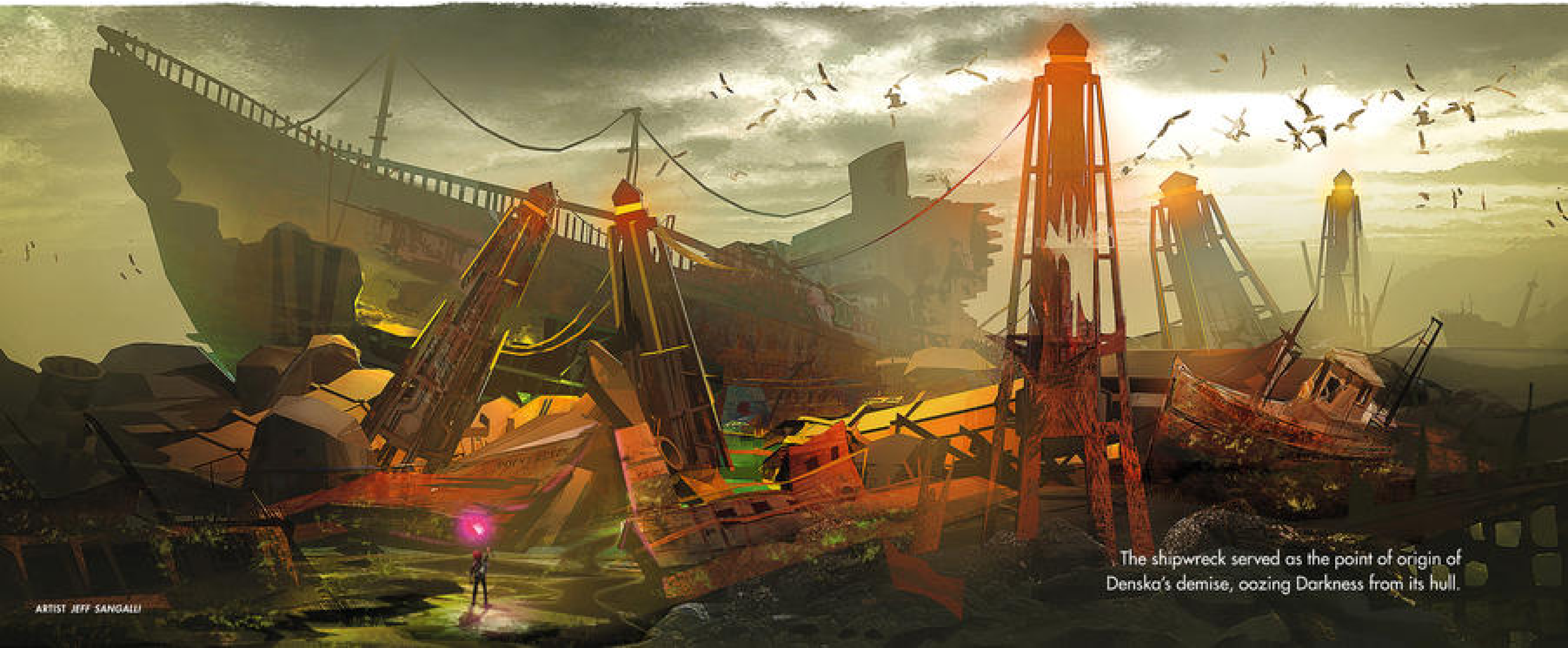
ARTIST JEFF SANGALLI (BELLOW AND TOP-RIGHT)


DENSKA
SARDINES
LONG
FISH
5124
CRANE
COMPANY



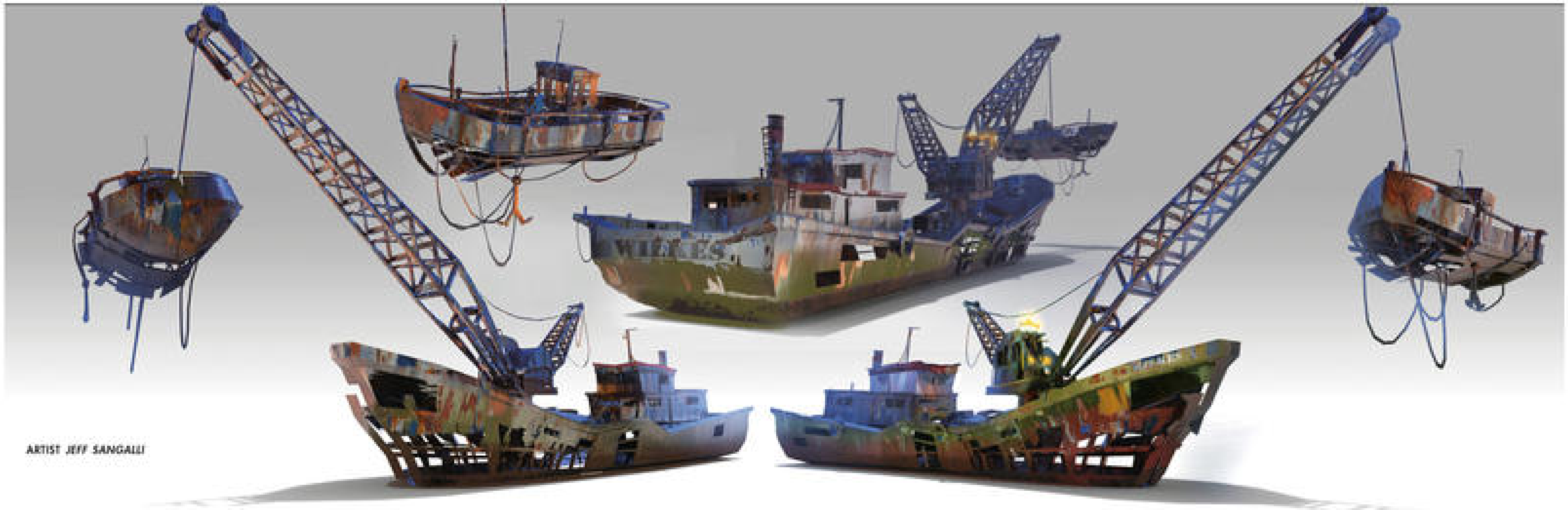


ARTIST TAYLOR LAMBERT

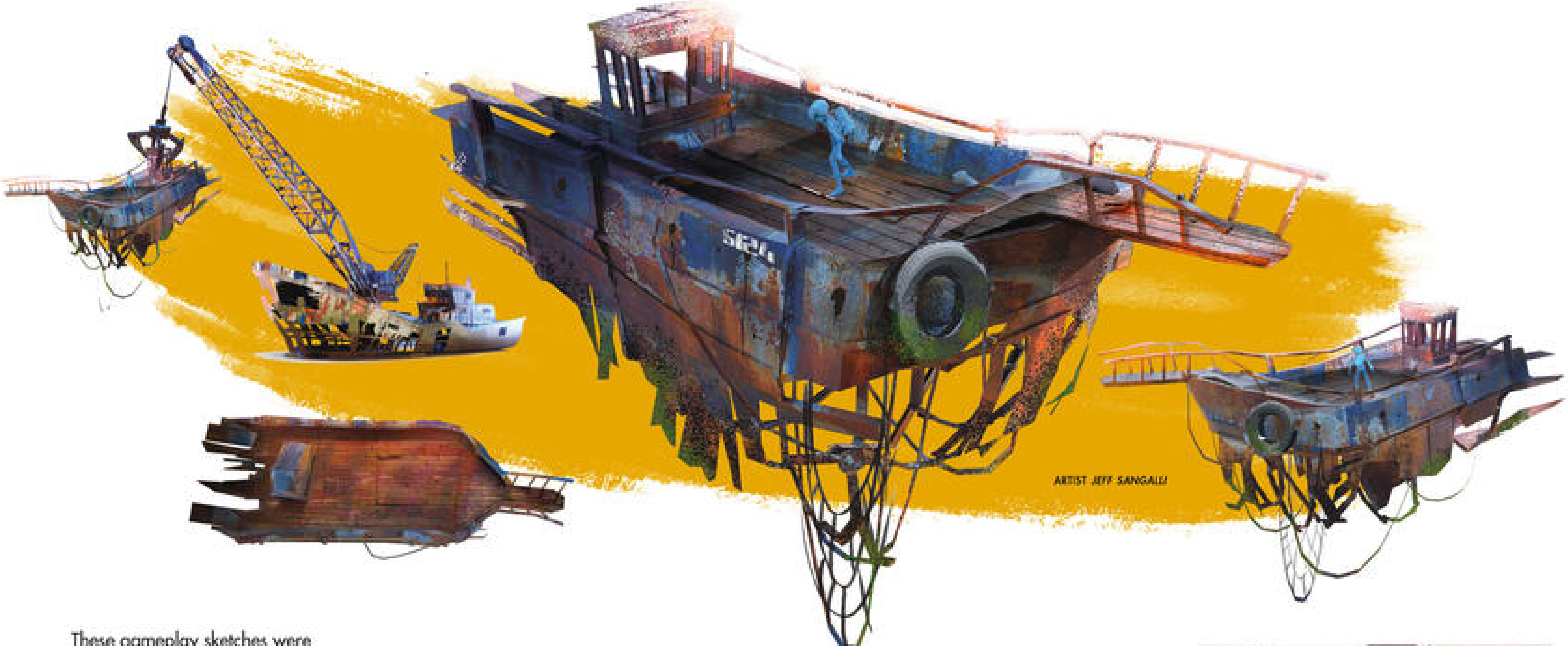


The shipwreck served as the point of origin of Denska's demise, oozing Darkness from its hull.

ARTIST JEFF SANGALLI



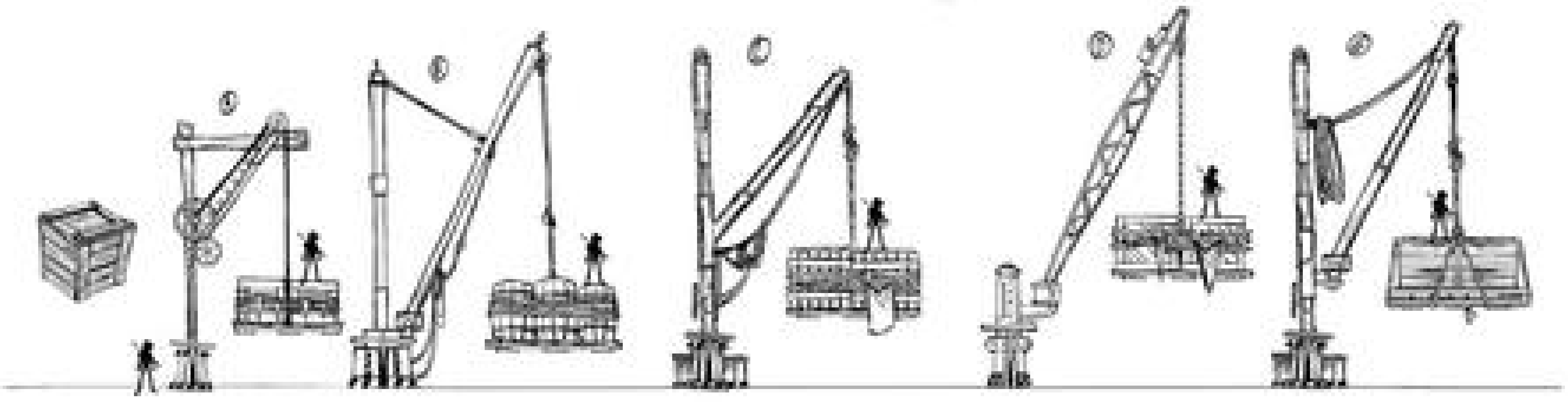
ARTIST *JEFF SANGALLI*

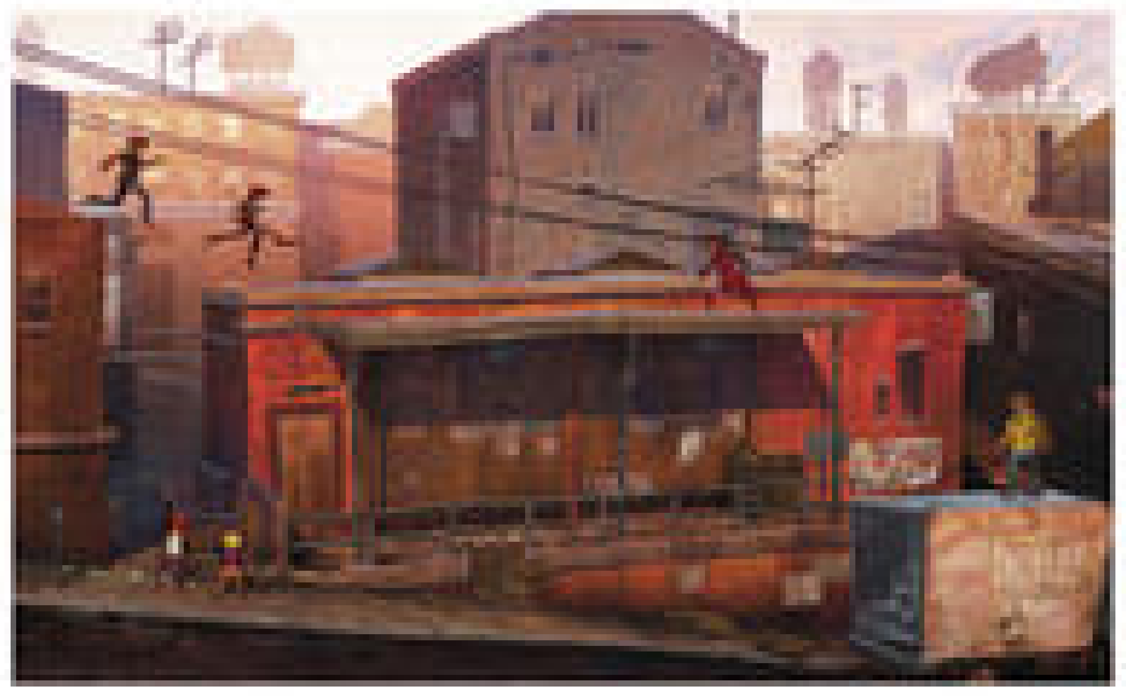


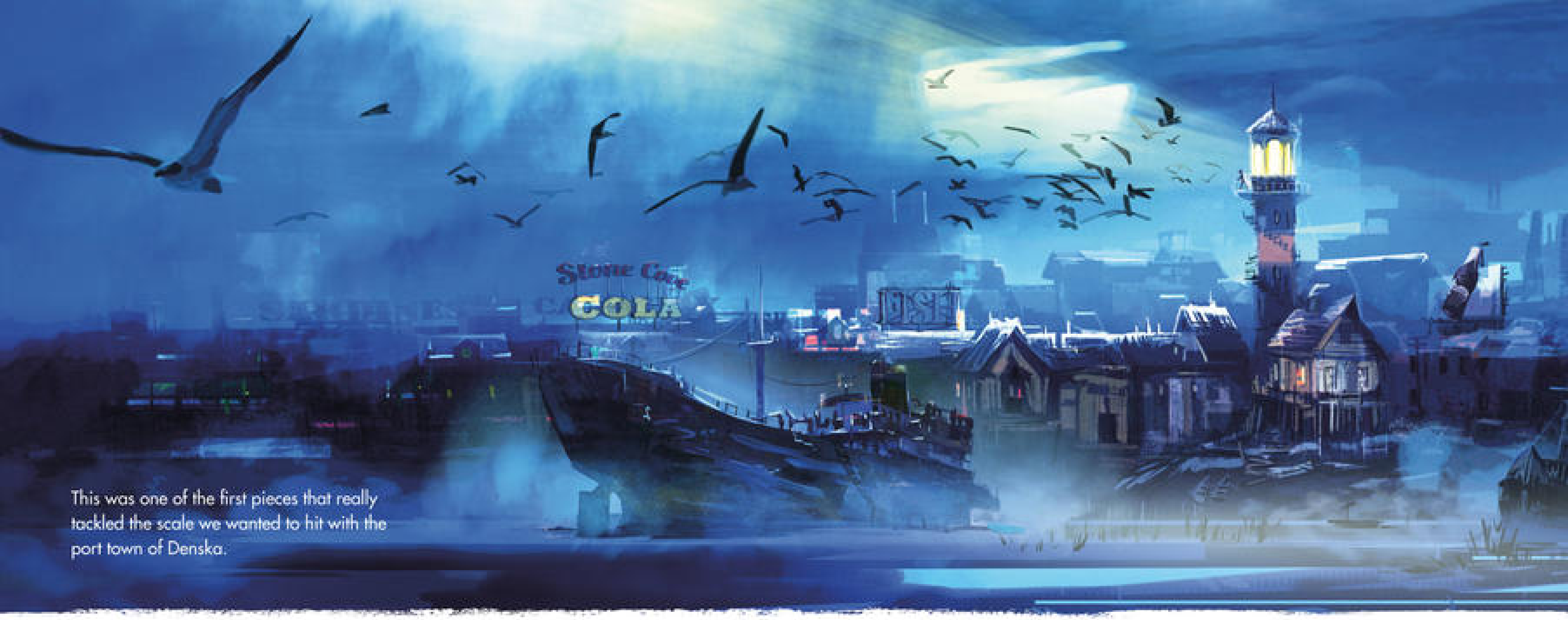
ARTIST *JEFF SANGALLI*

These gameplay sketches were to help level design visualize puzzles for the player, using various cranes and other pieces of machinery.

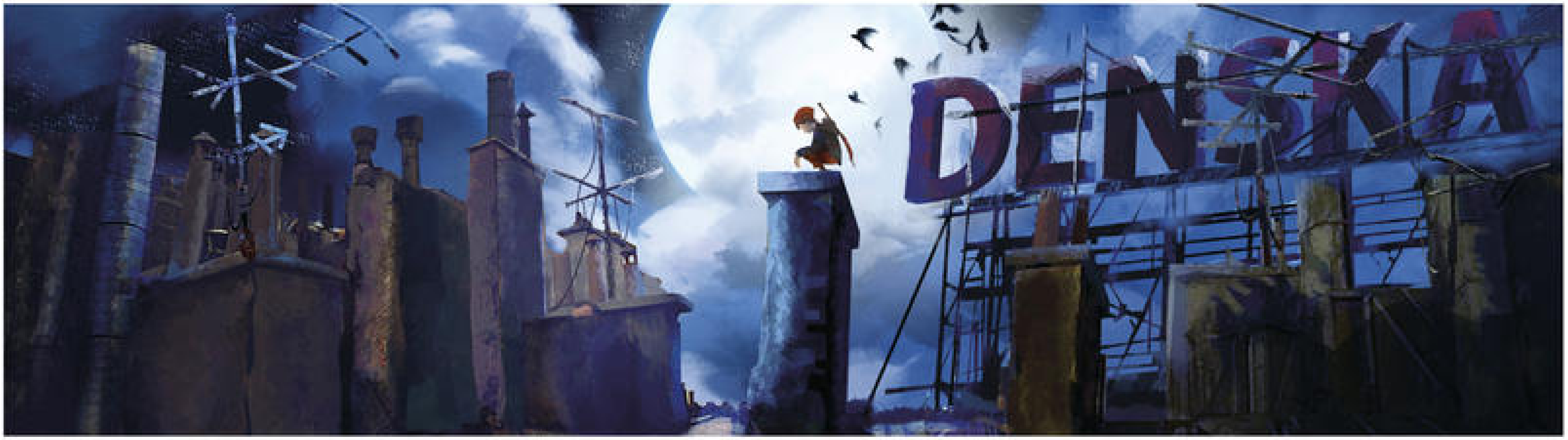
ARTISTS *LANCING LOVE CHEN (LEFT), TAYLOR LAMBERT (RIGHT)*



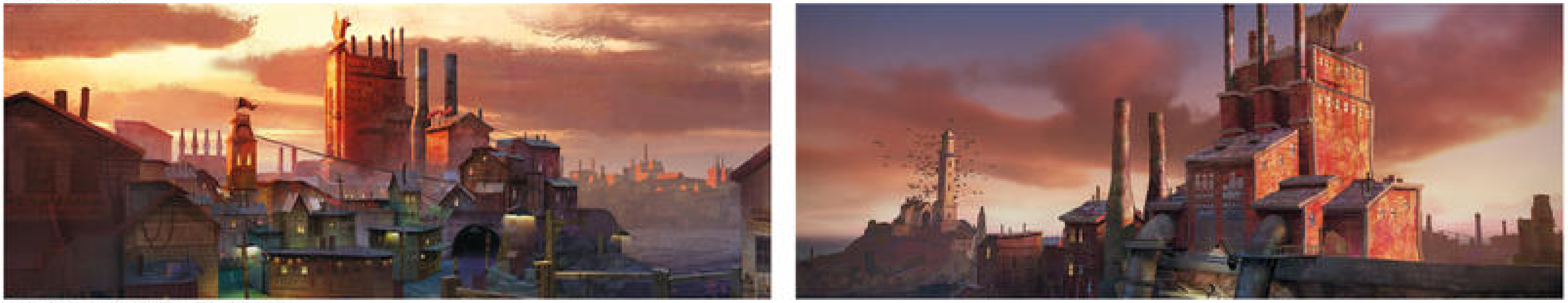



Stone Cove
COLA

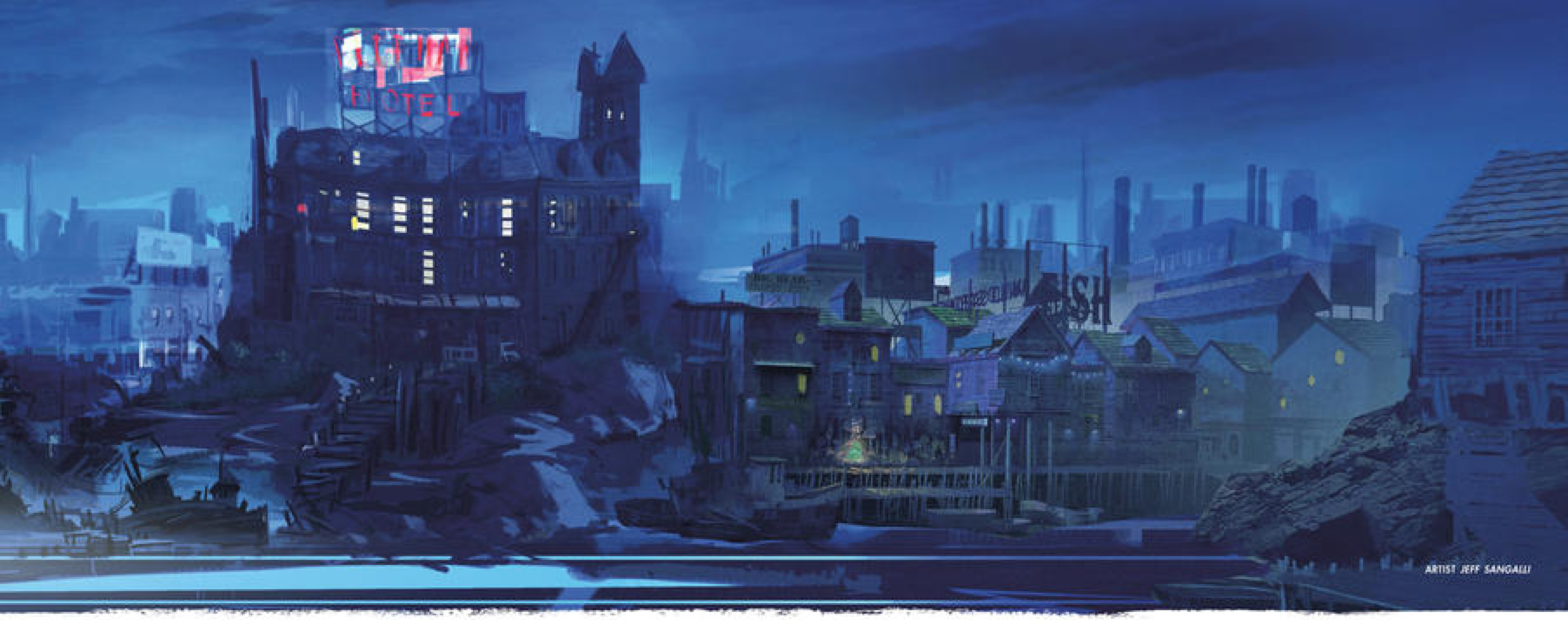
This was one of the first pieces that really tackled the scale we wanted to hit with the port town of Denska.



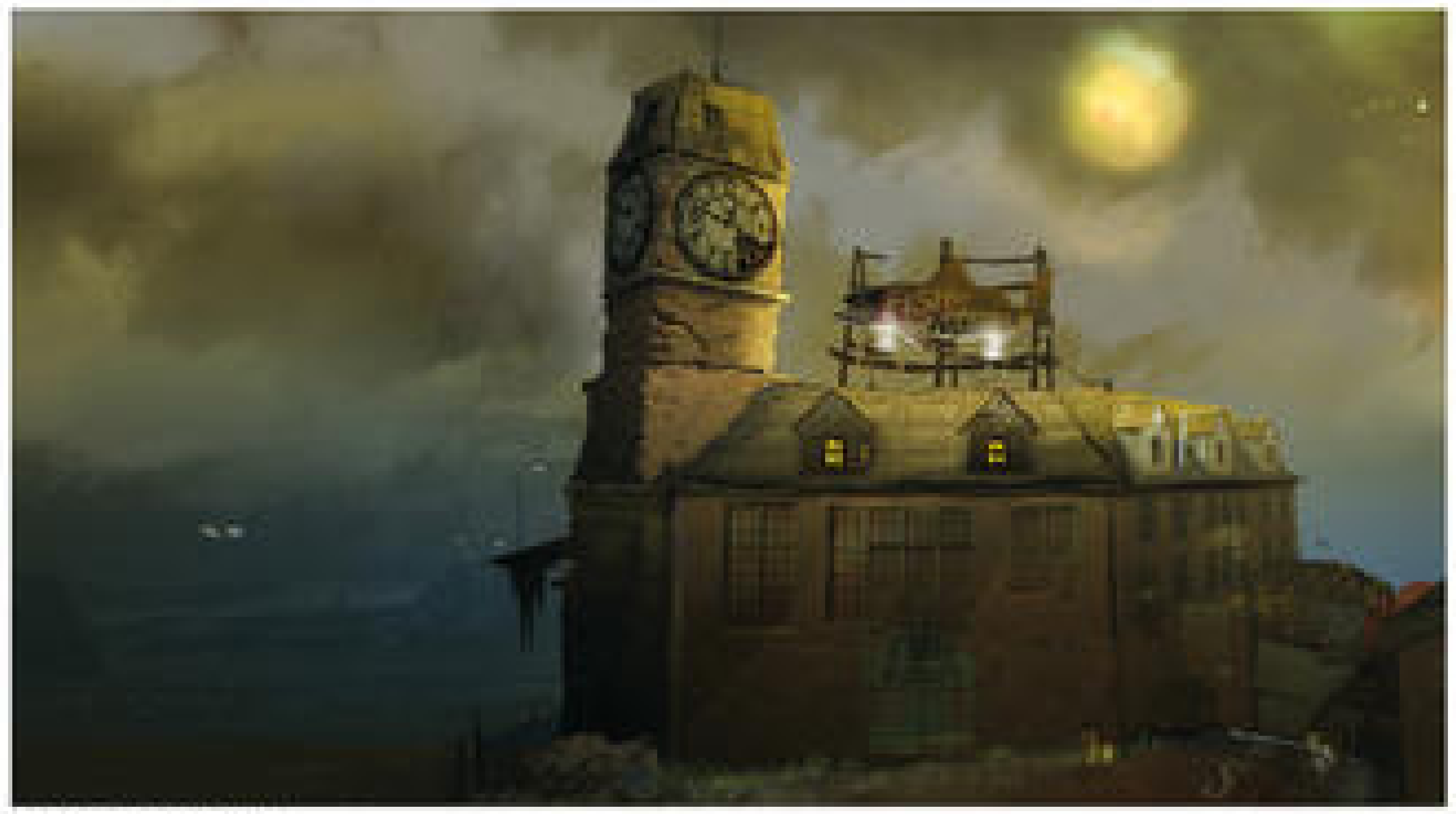
ARTIST JEFF SANGALLI



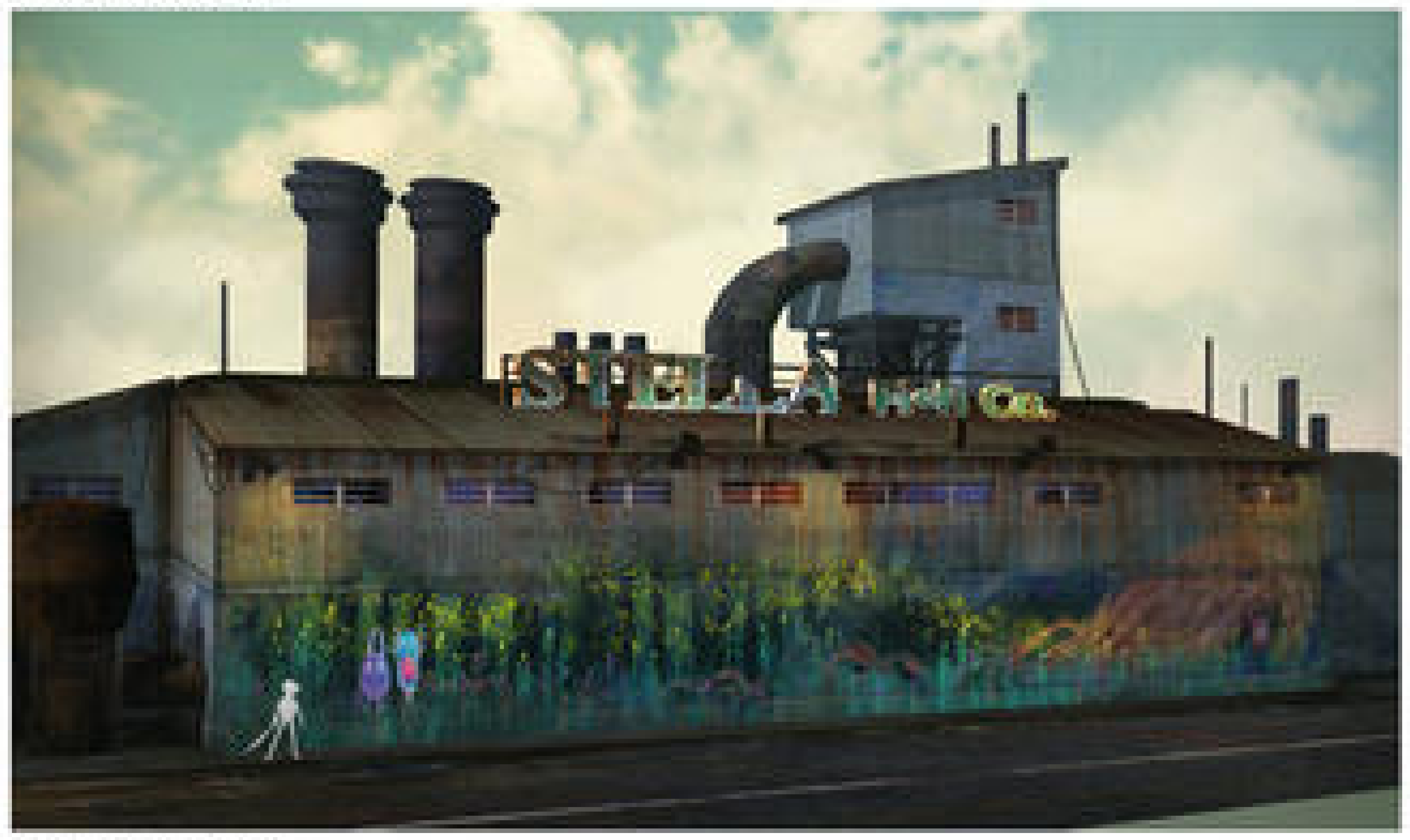
ARTIST TAYLOR LAMBERT (BOTTOM LEFT AND RIGHT)



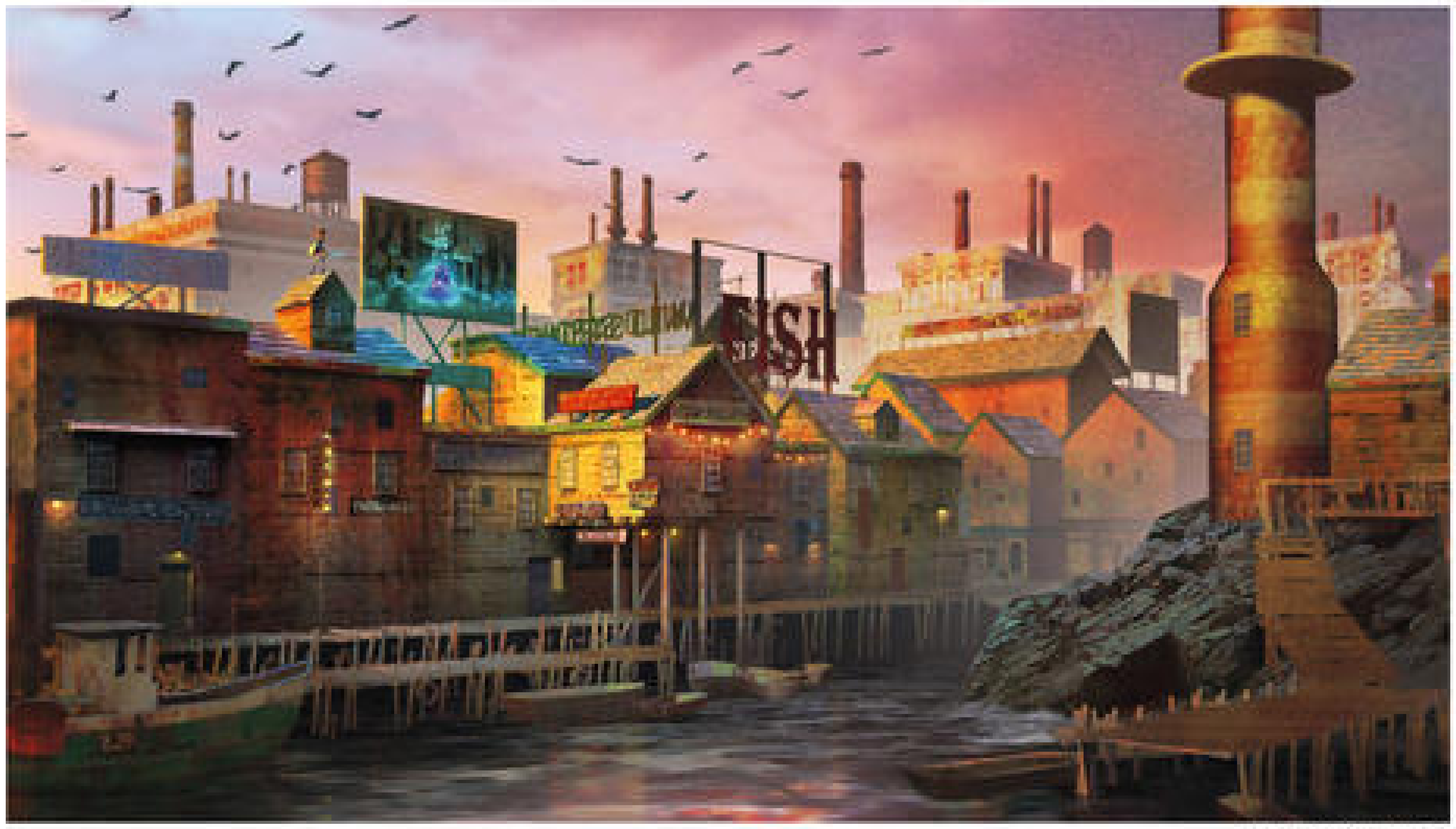
ARTIST JEFF SANGALLI



ARTIST JEFF SANGALLI



ARTIST TAYLOR LAMBERT



ARTIST TAYLOR LAMBERT

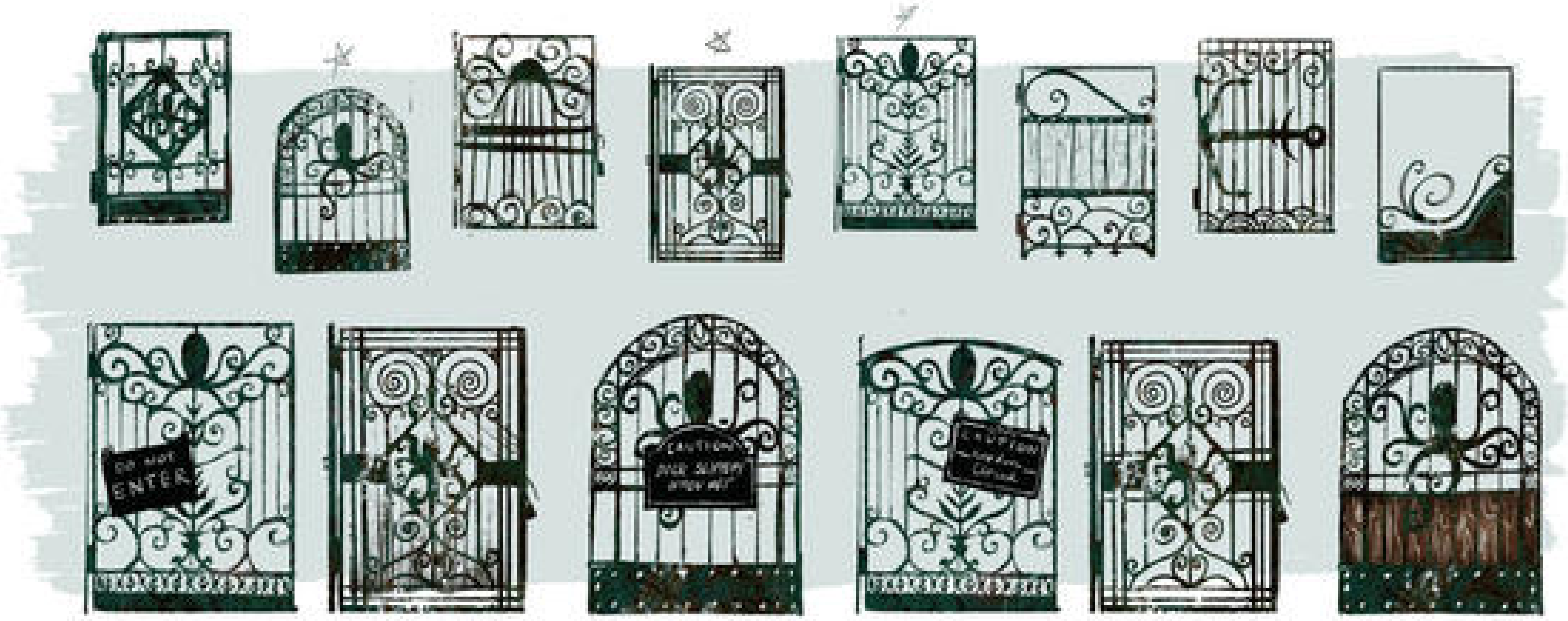
FISHING PORT

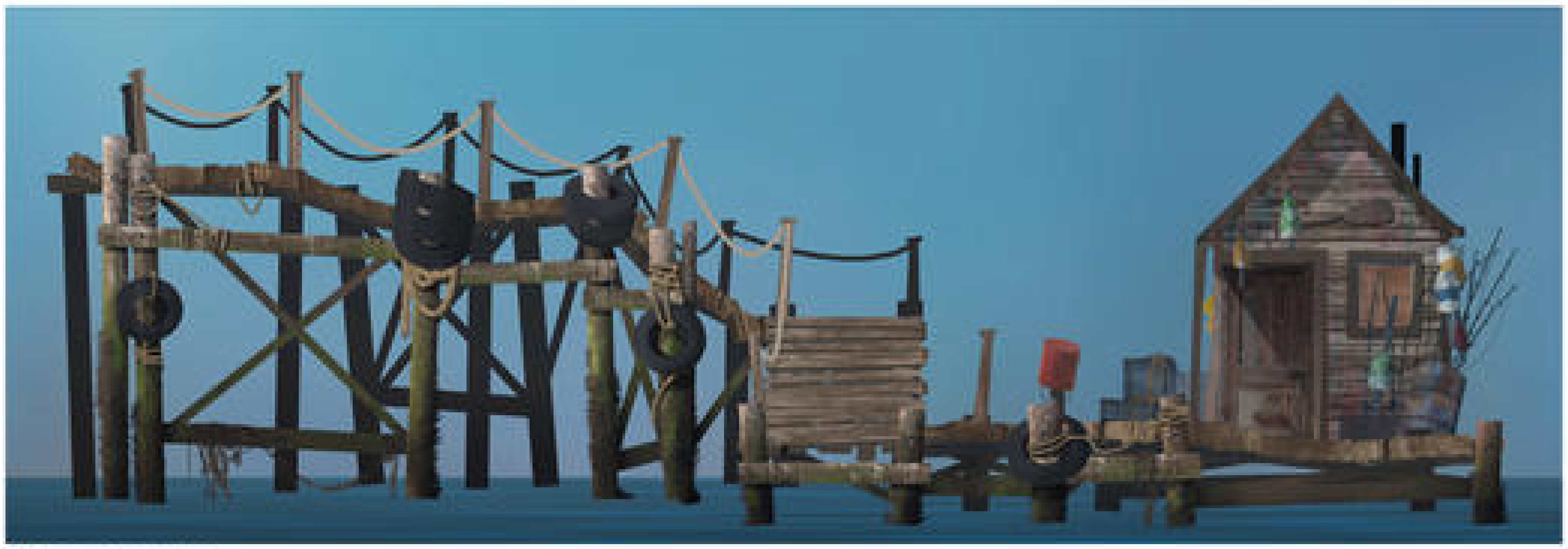
A big challenge in designing the game world was in creating large, flat surfaces that would allow Ash to paint upon, while also appearing natural and logical in construction.

PROP DESIGN CONCEPT

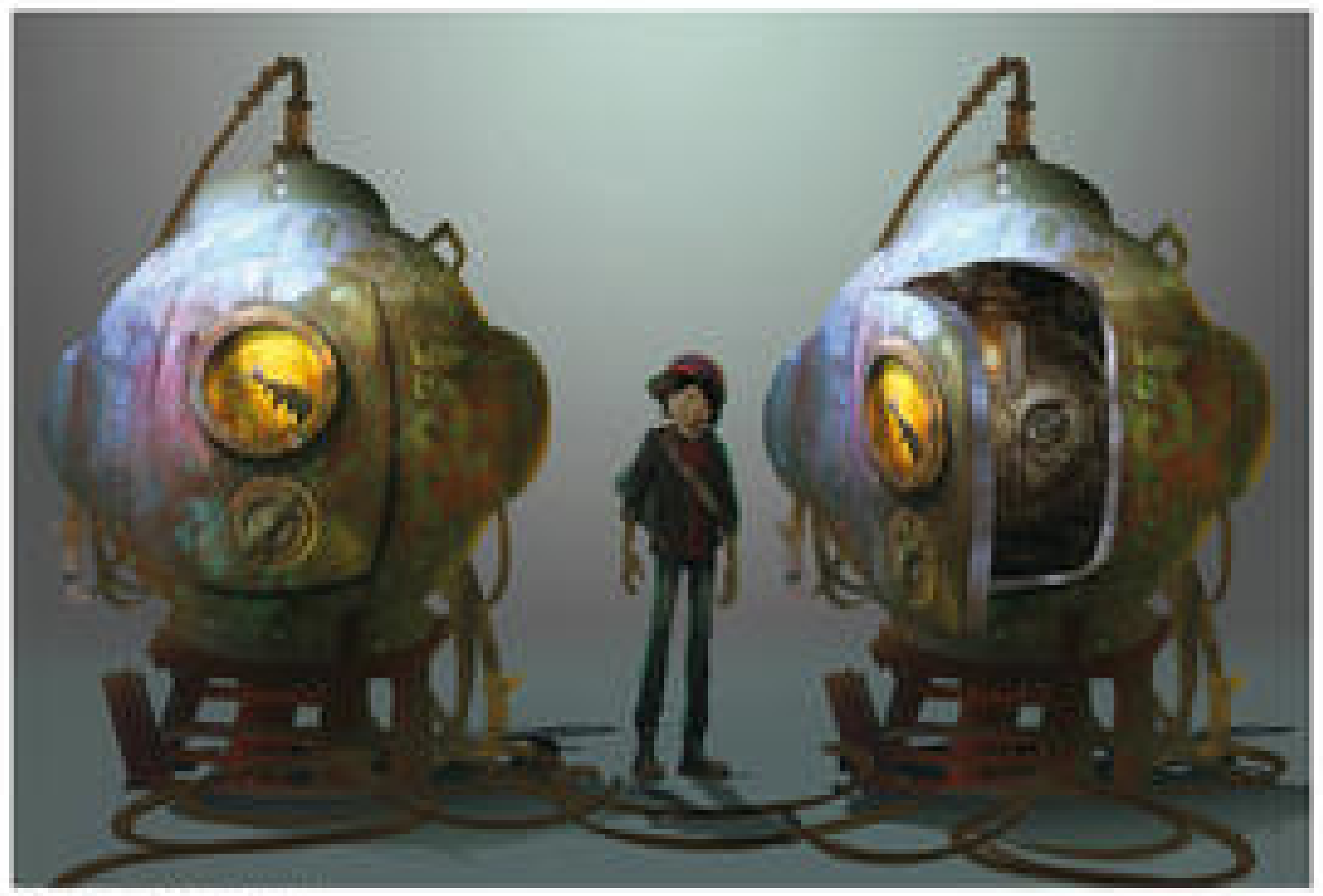
This is an example of our ideation process. We would sketch multiples designs for every environmental element, looking for the one that tells the story of the environment best.

ARTIST *MAAIKE SCHERFF (RIGHT)*


DO NOT ENTER
CAUTION DOCK SLIPPERY WHEN WET
CAUTION



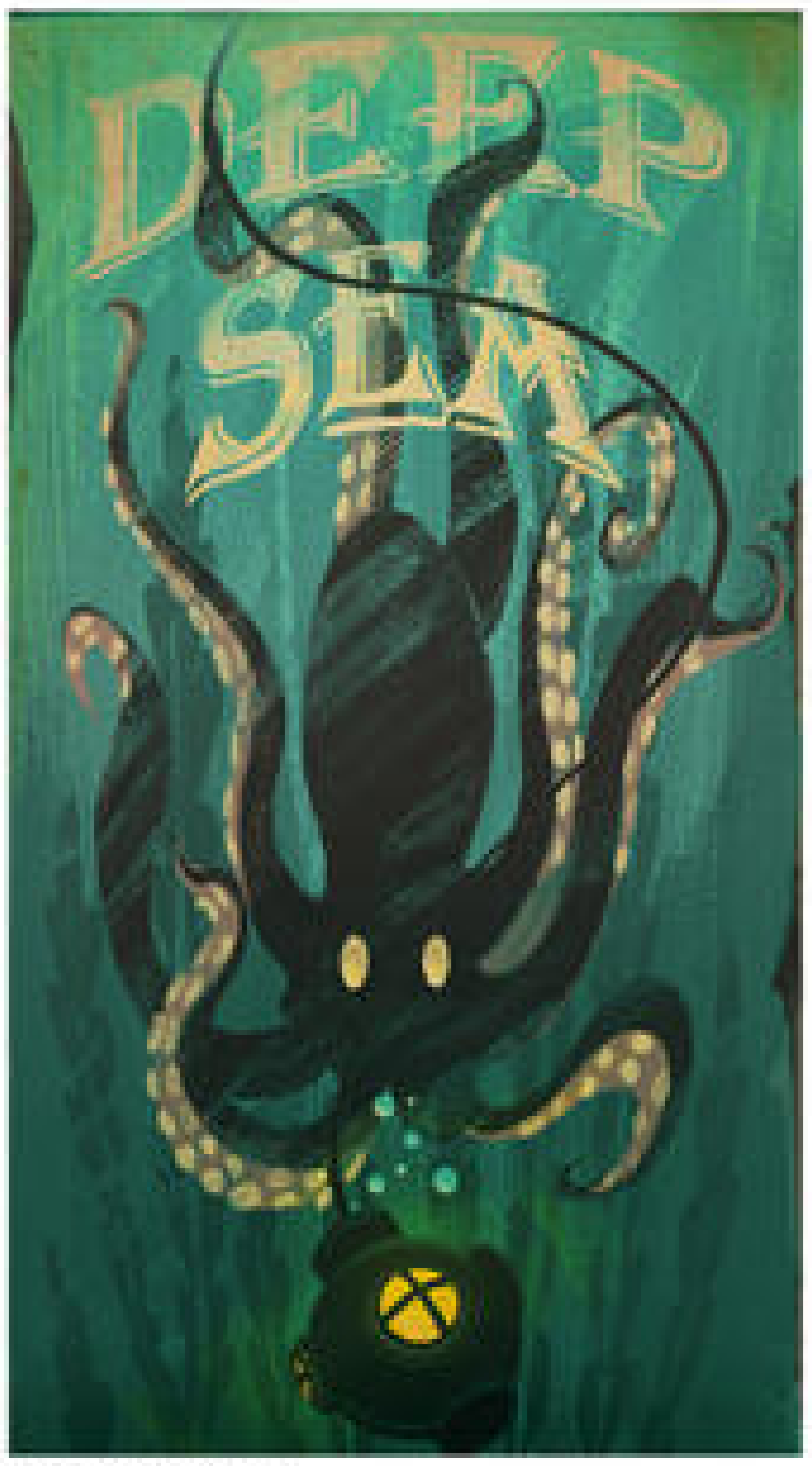
ARTIST *TAYLOR LAMBERT*



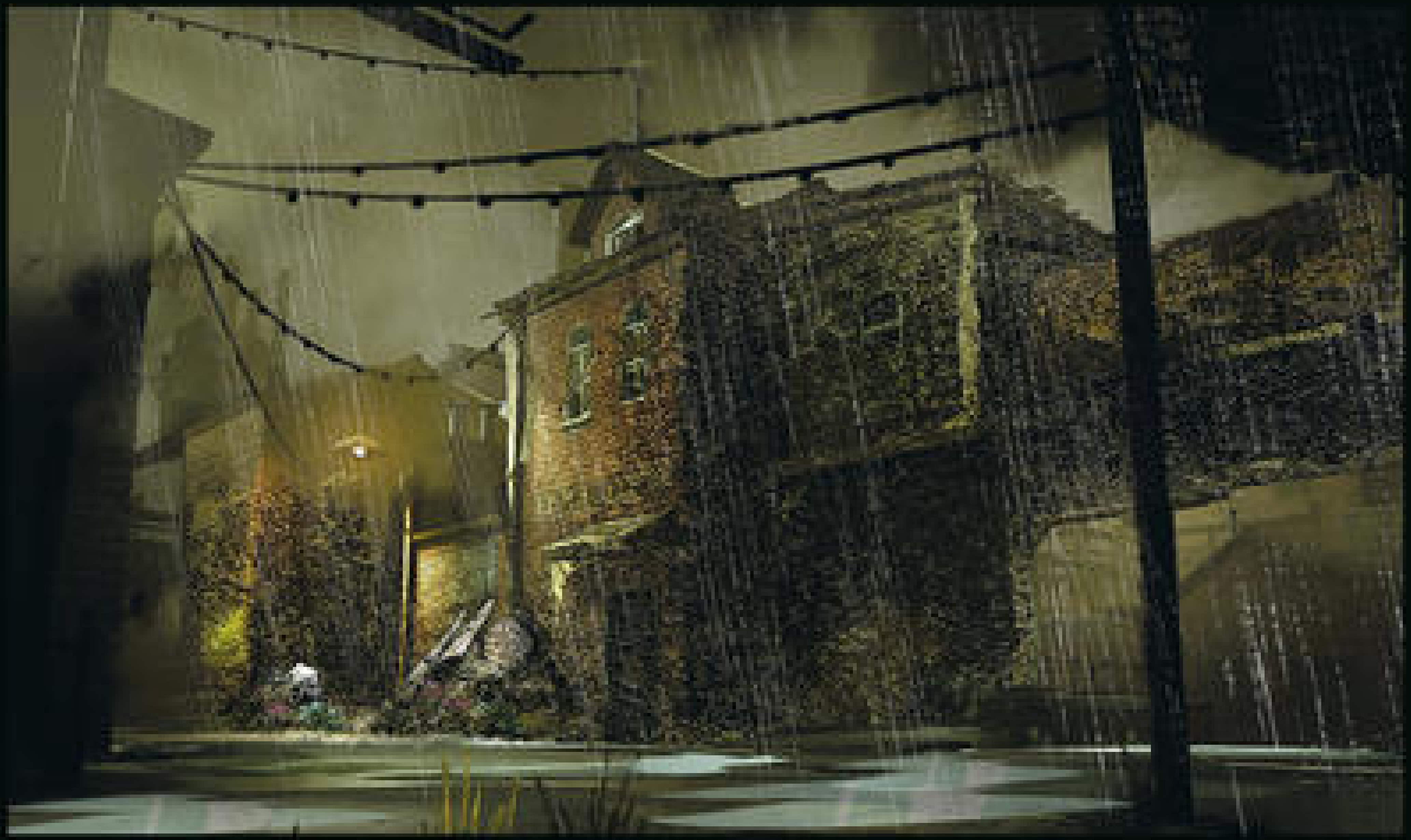
ARTIST *JEFF SANGALLI*

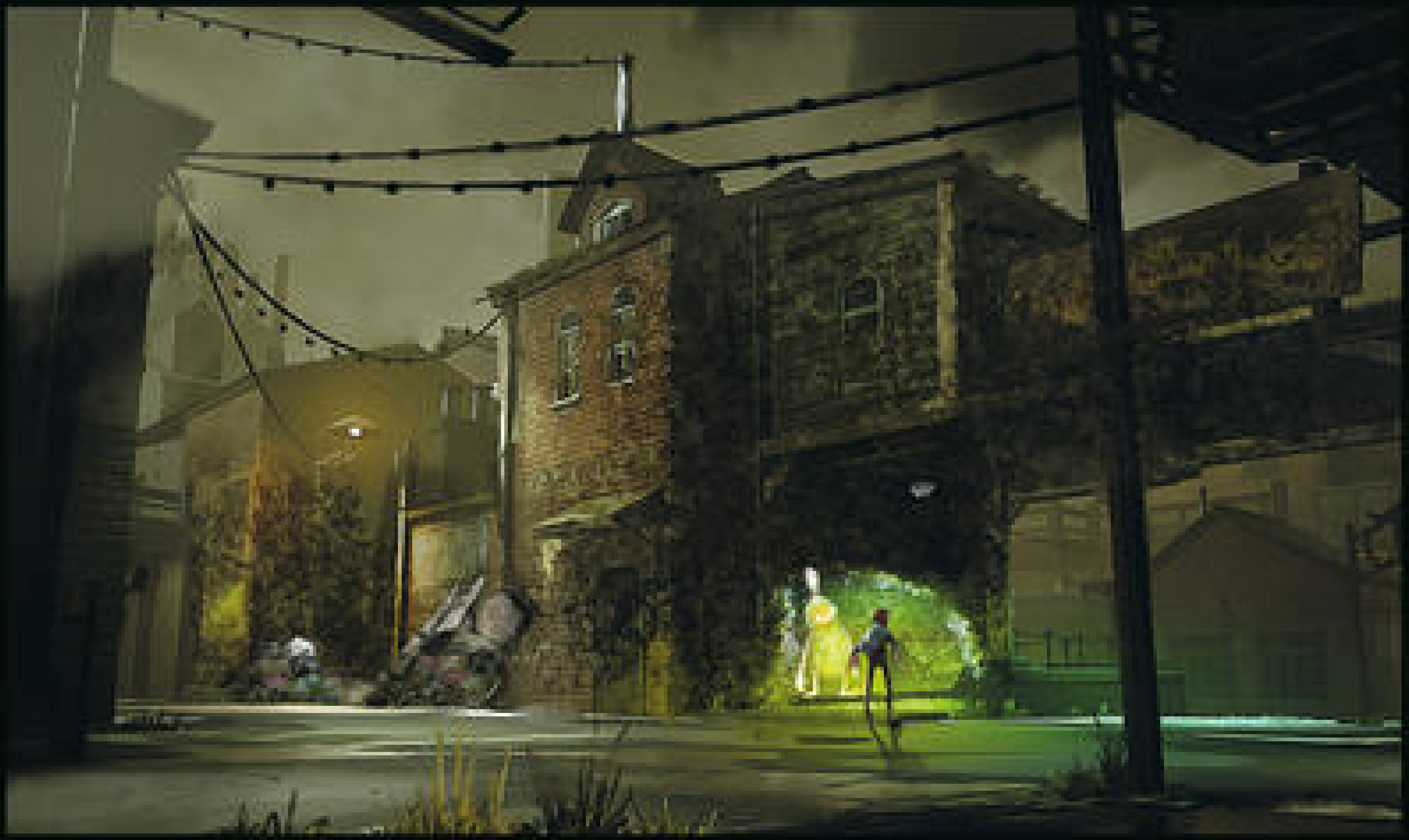
ARTIST *JEFF SANGALLI*

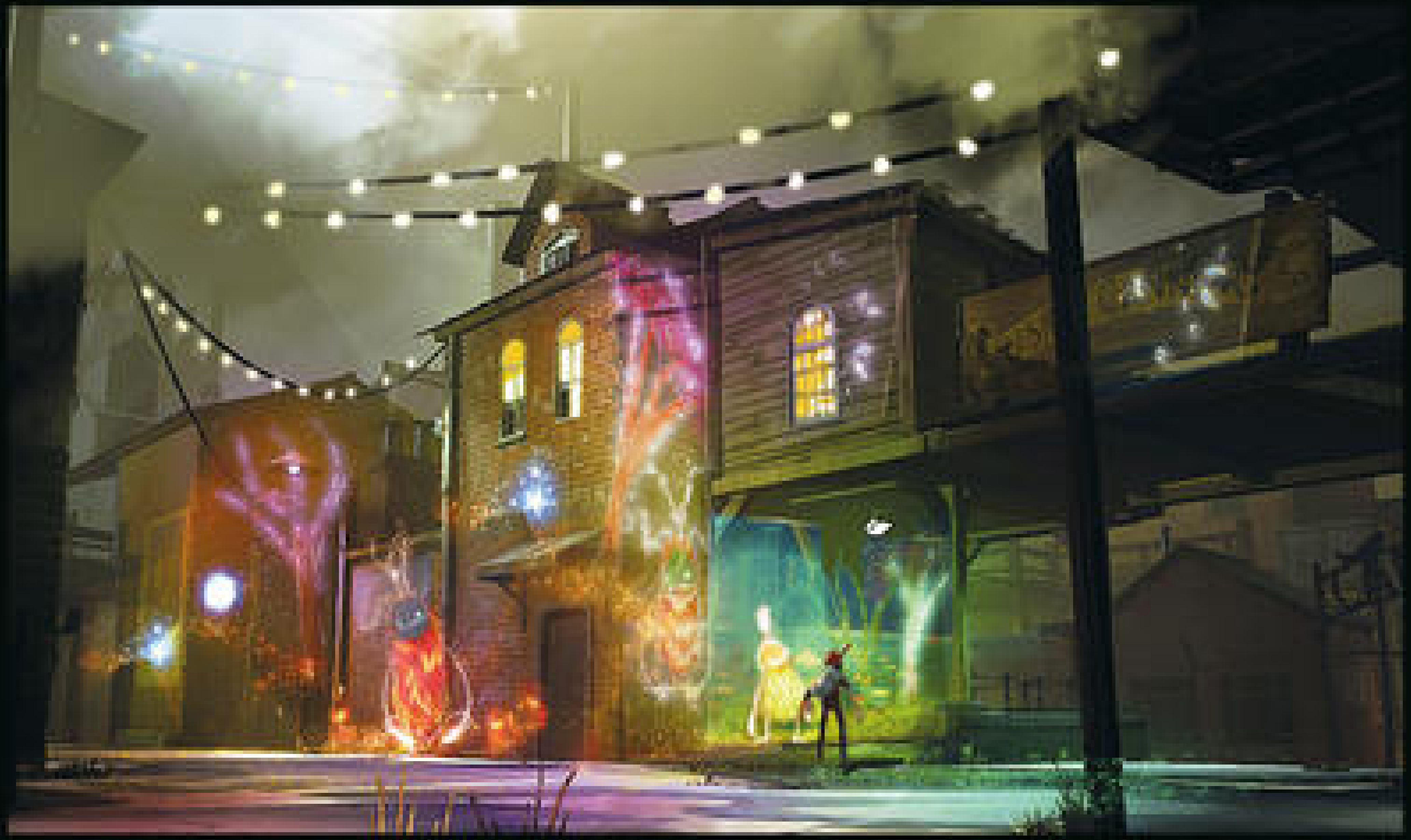
ARTIST *DANIEL WILKES*

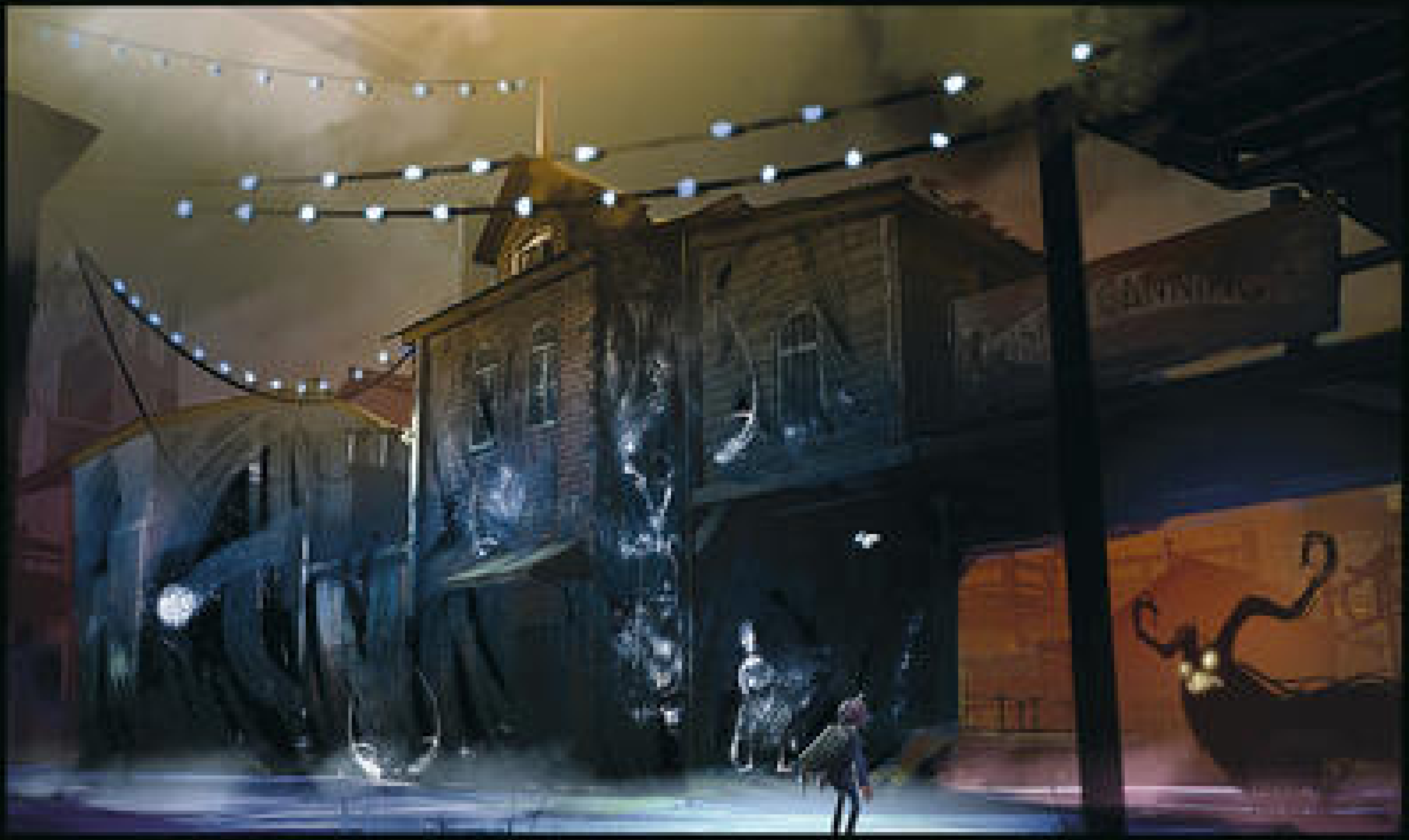


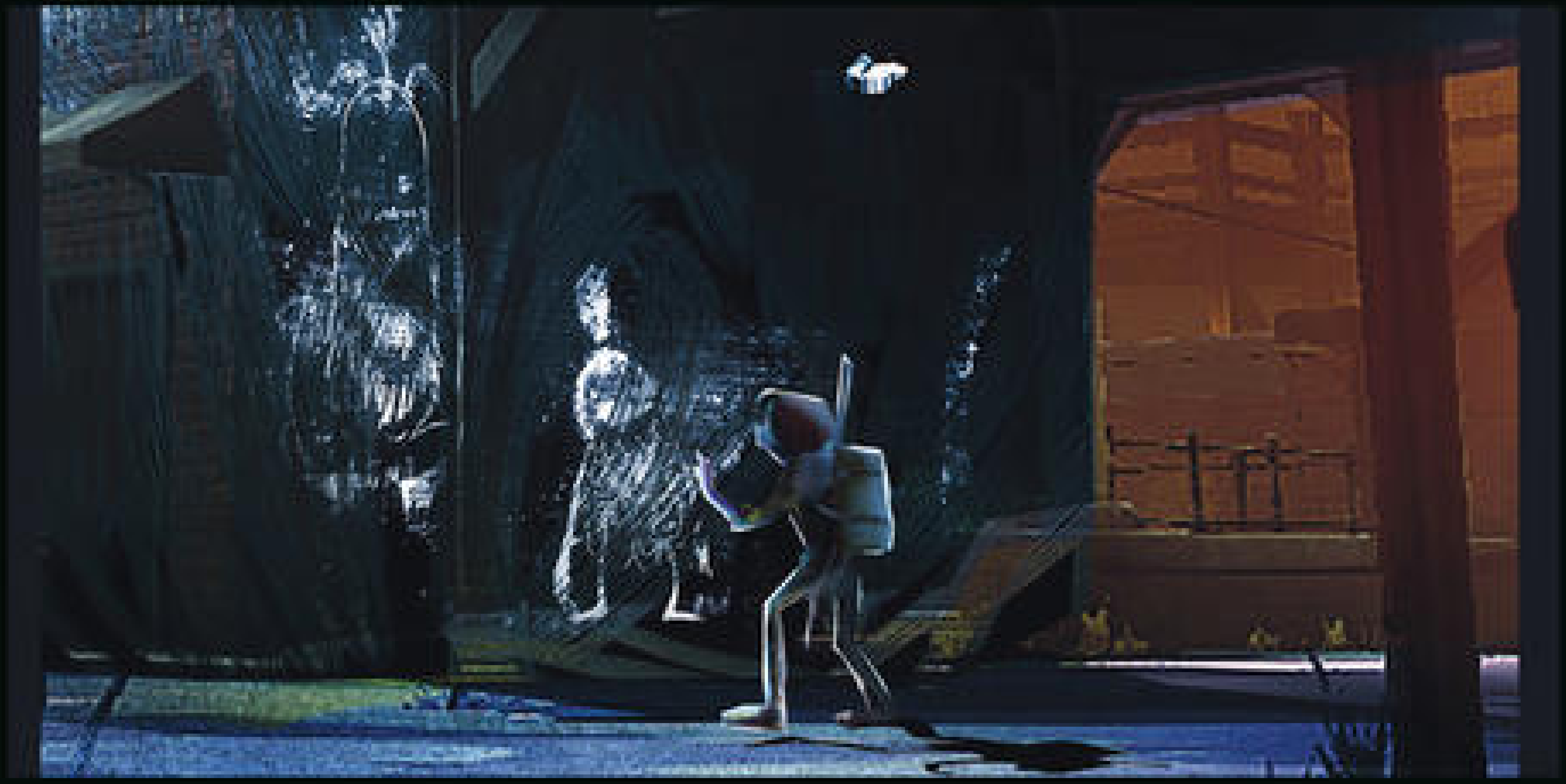
ARTIST *JEFF SANGALLI*







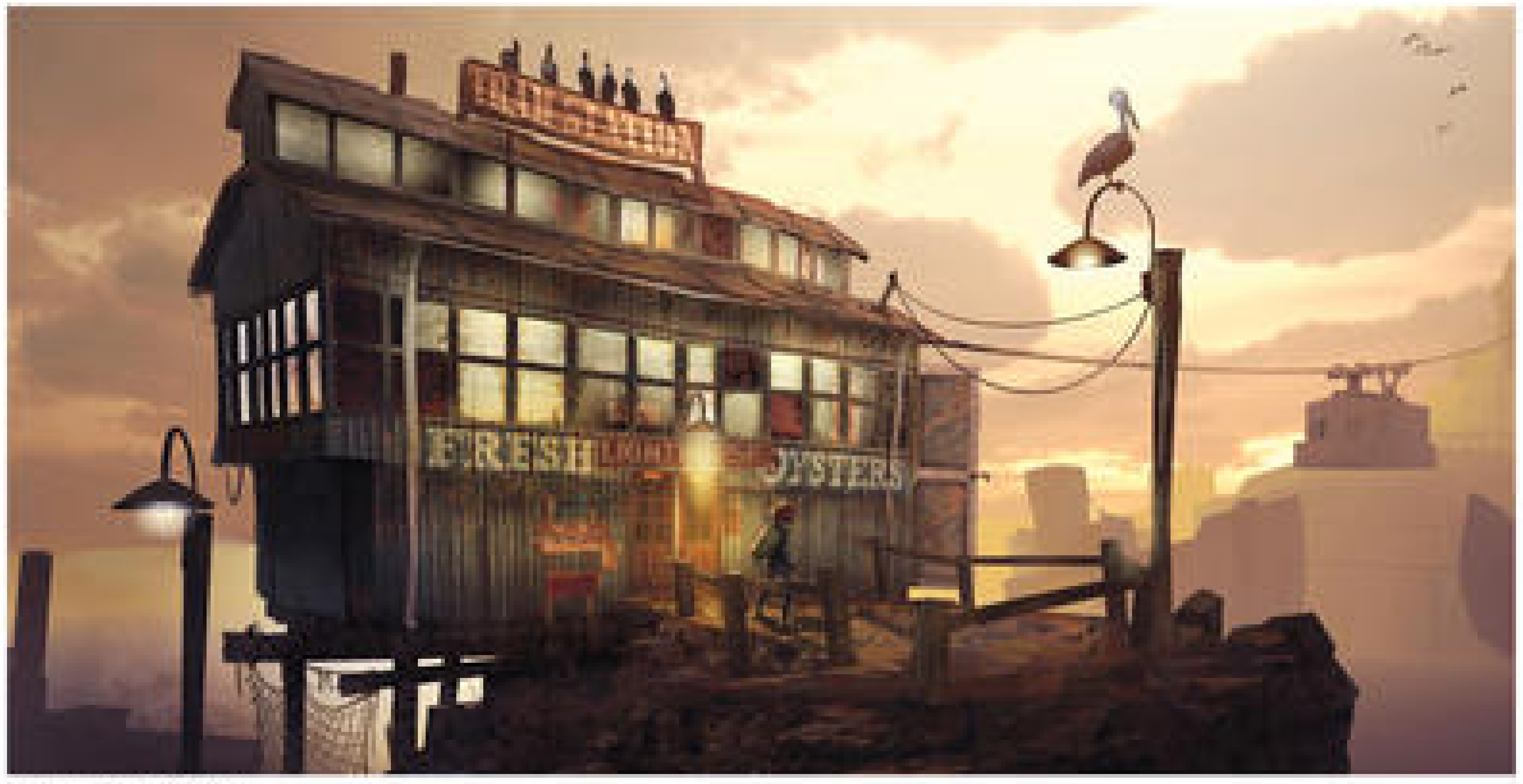




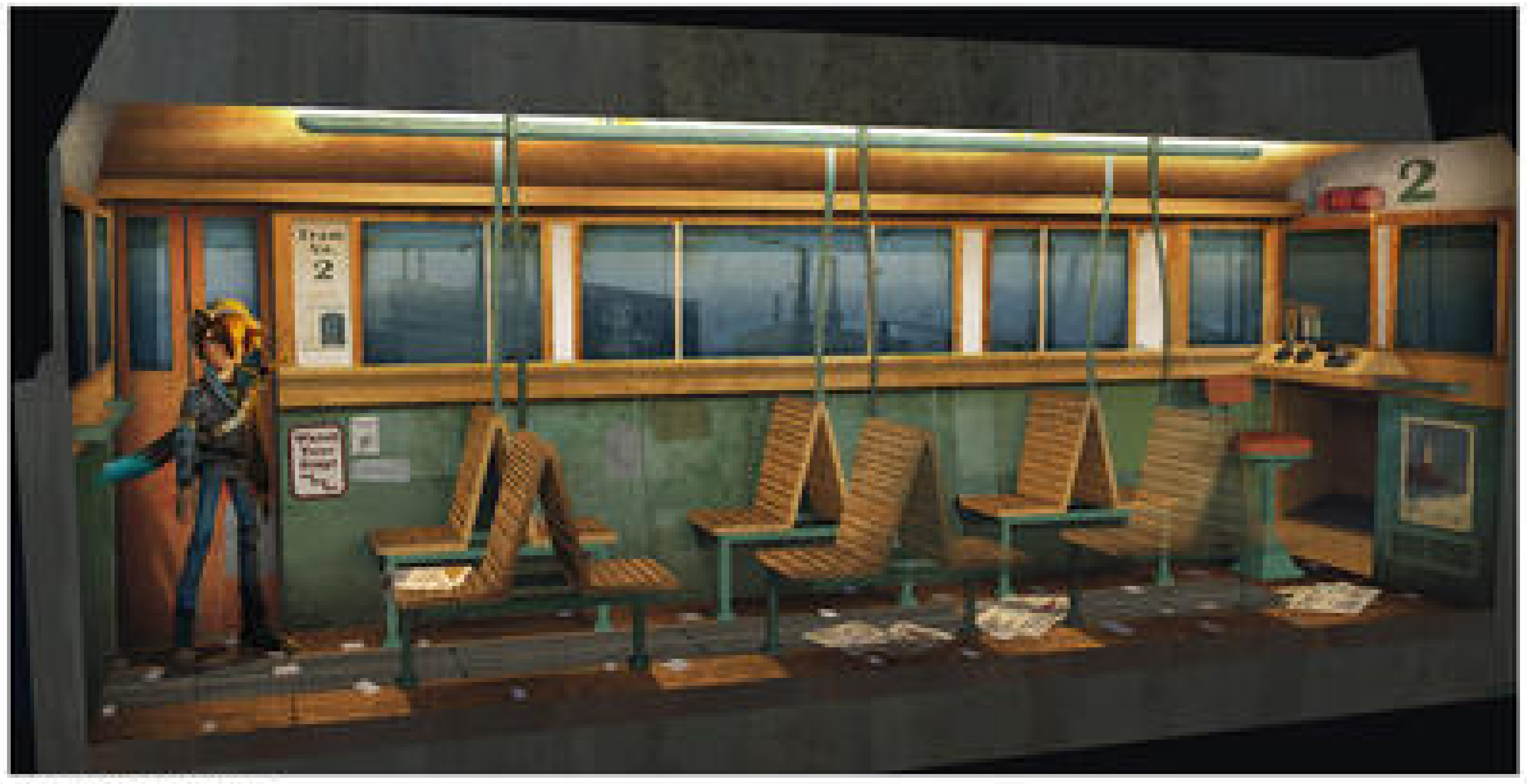
COLOR EXPLORATION

As soon as the Living Paint mechanics started to shine in the game, we knew that we really wanted the paint the player places on the walls to feel like it was bringing light and life to the world itself. As if the creative energy that Ash was bringing to the environment was changing it, transforming it in as visual a way as possible. The look that Jeff achieved with these images proved instrumental in inspiring the engineers to find multiple ways to make the Living Paint feel like it was truly transforming the world as you painted it.

ARTIST JEFF SANGALLI (THIS PAGE)



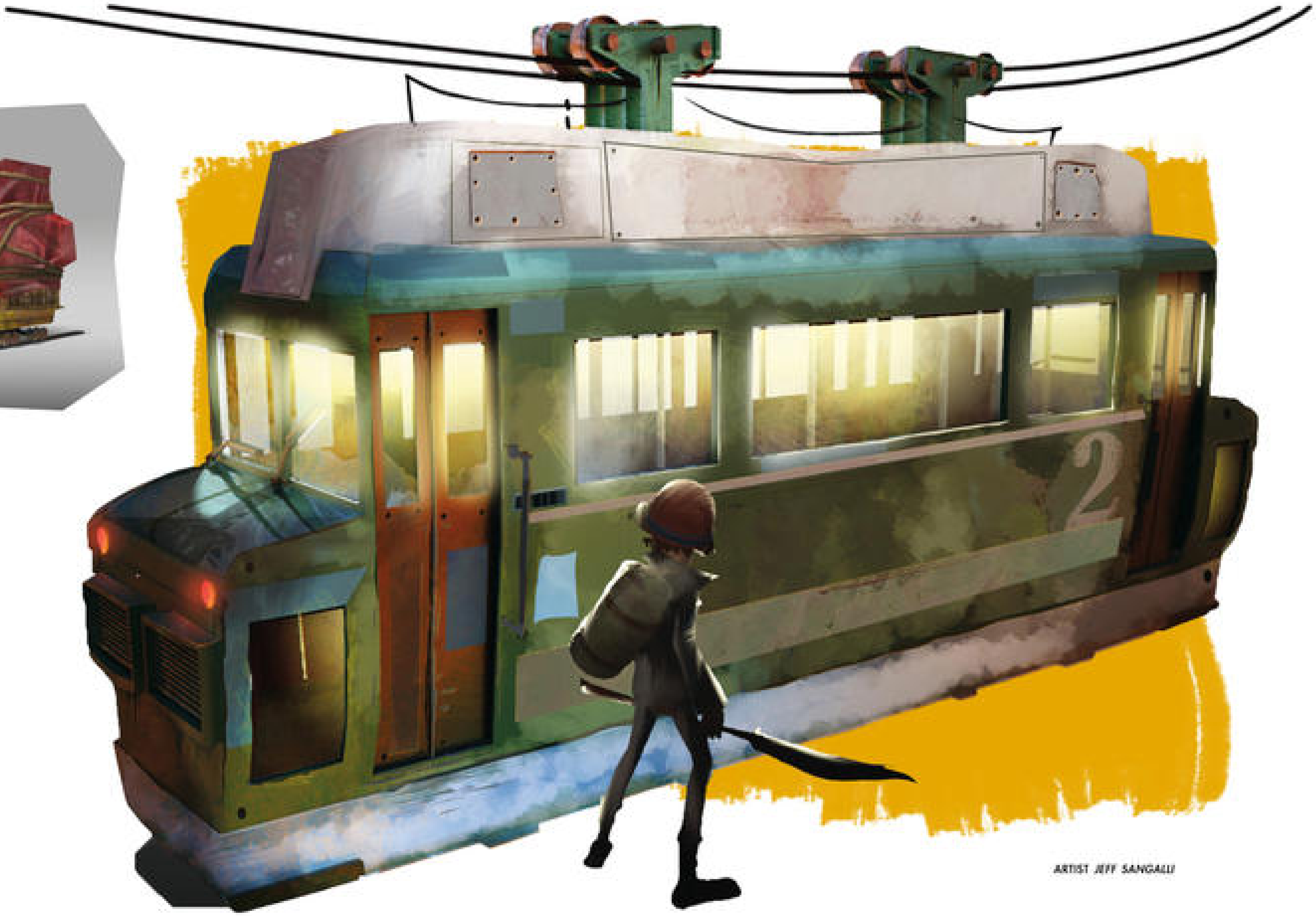
ARTIST JEFF SANGALLI



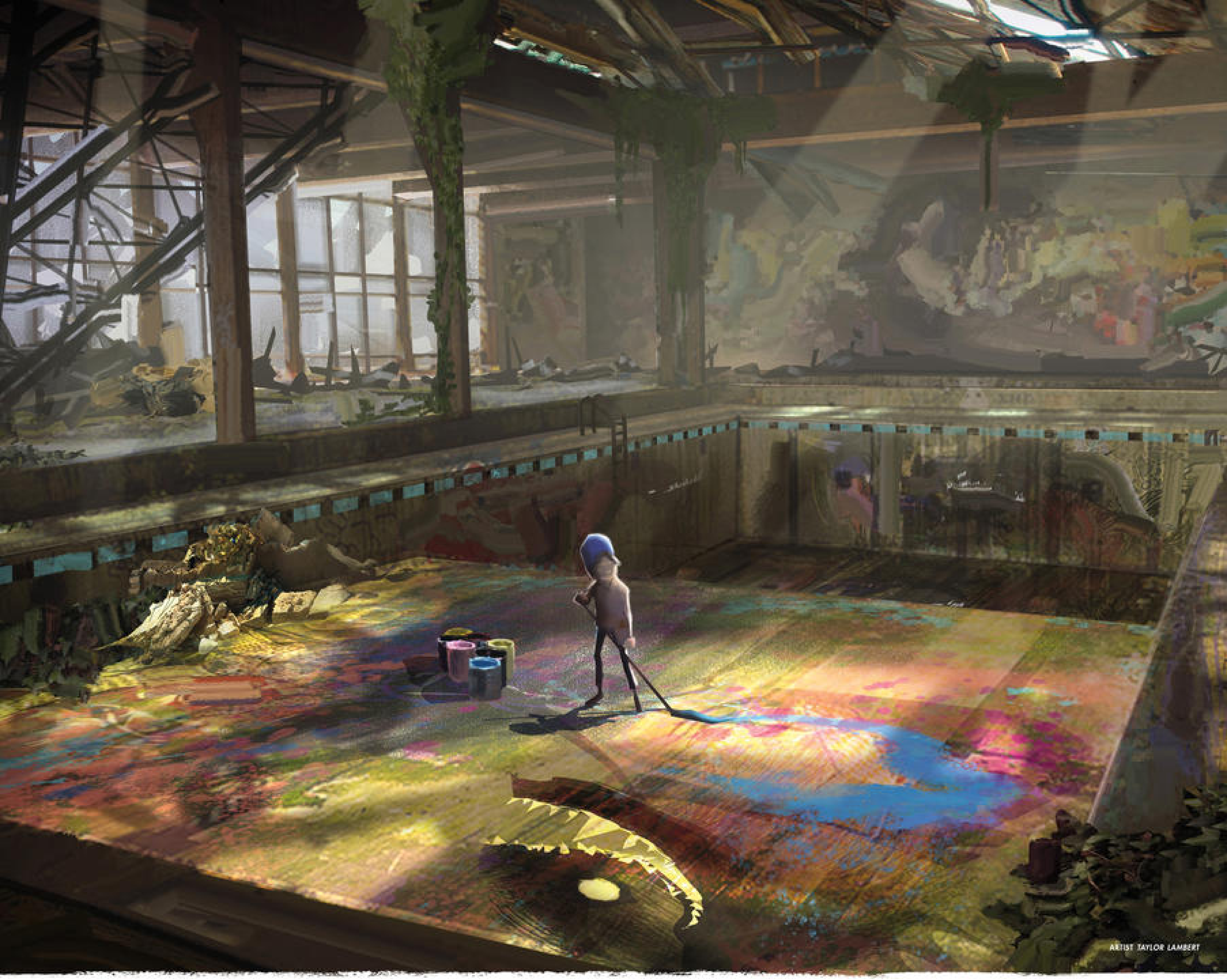
ARTIST TAYLOR LAMBERT

TRAM HOUSE

This shows the process for how we design a location, no matter how small it is. We applied this inside-and-out methodology to every location in the game.



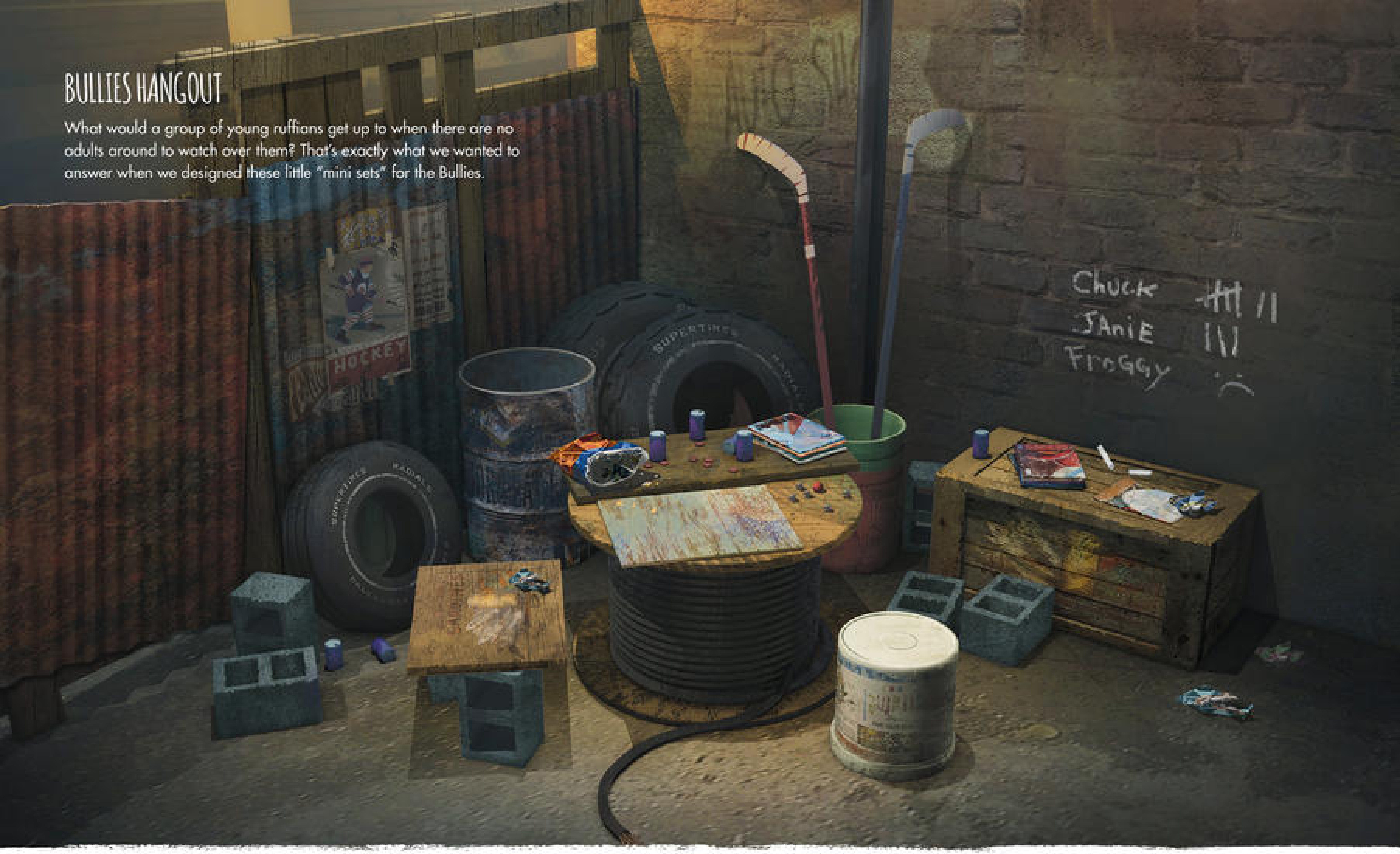
ARTIST JEFF SANGALLI

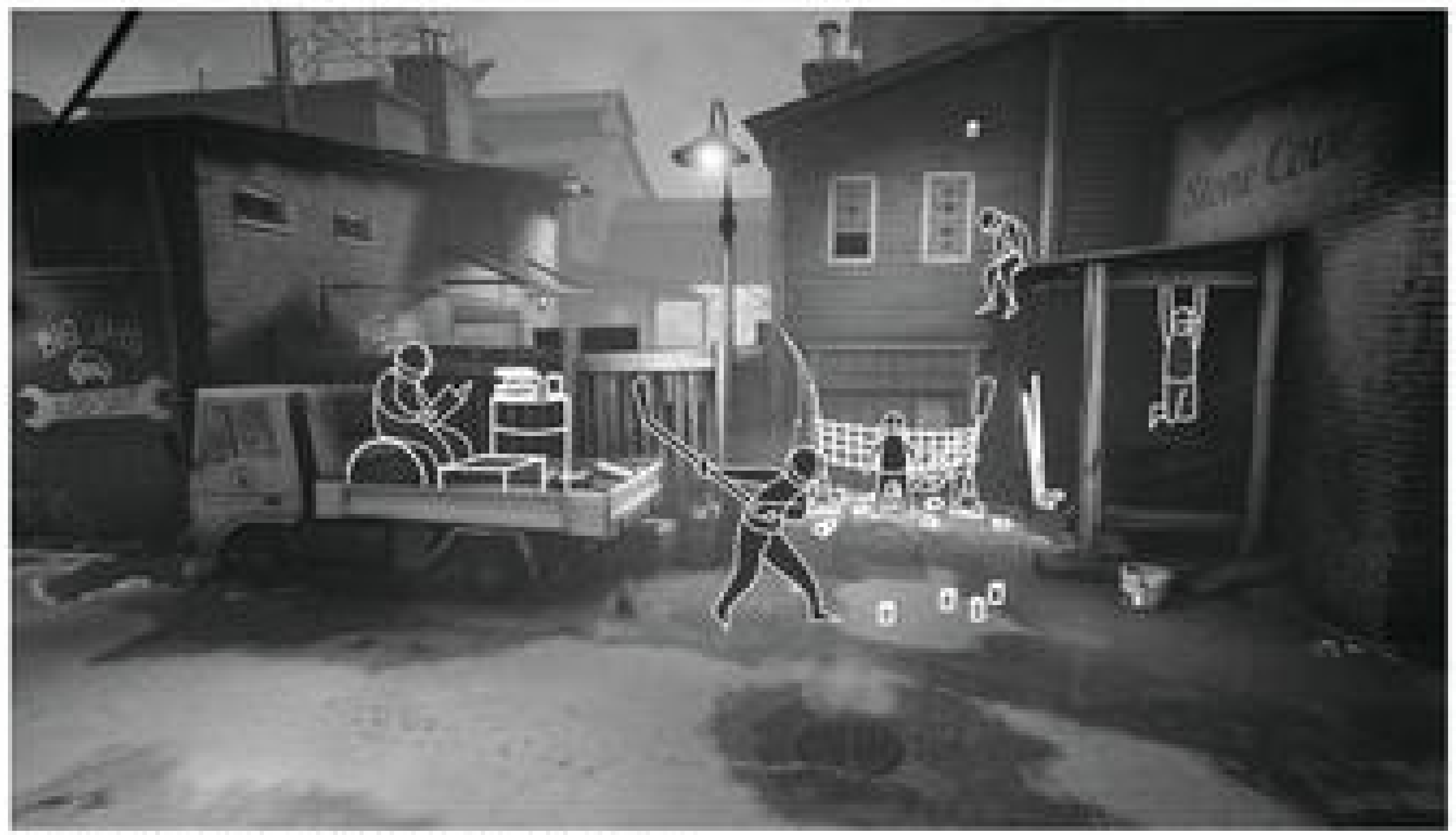


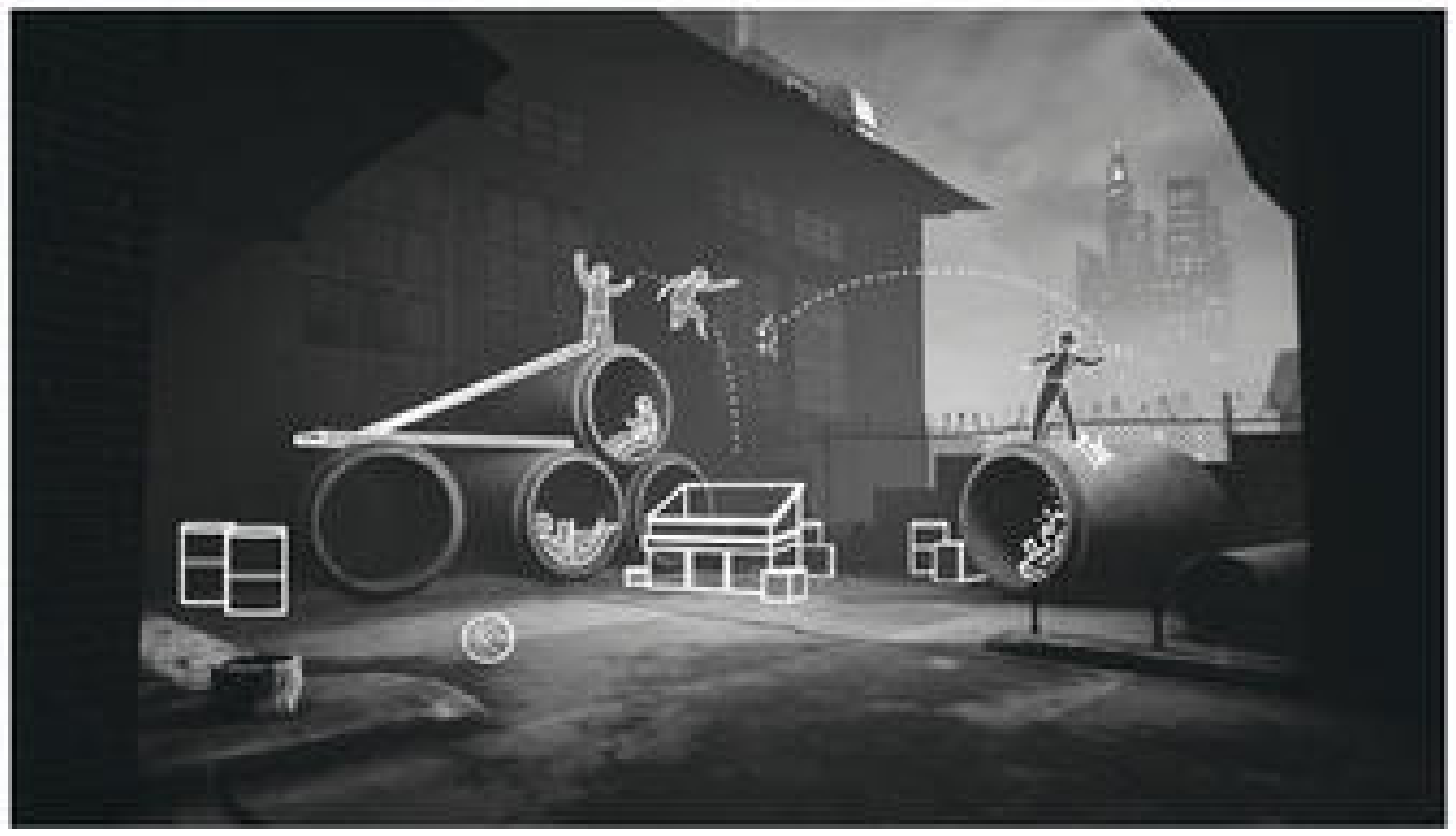
Early exploration sketches like these don't often show up in the final look of the game, but they frequently provide many ideas that can be useful later in the development process.

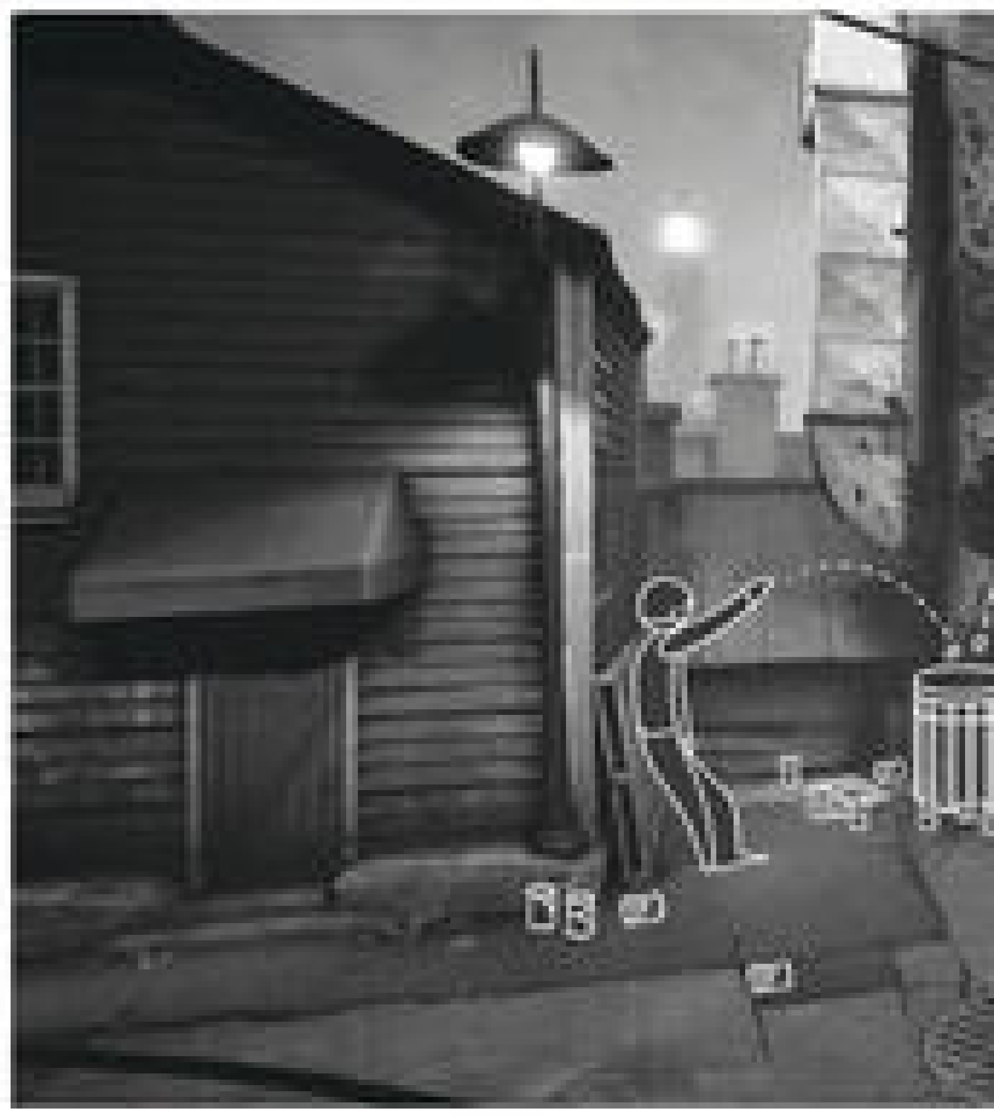
BULLIES HANGOUT

What would a group of young ruffians get up to when there are no adults around to watch over them? That's exactly what we wanted to answer when we designed these little "mini sets" for the Bullies.

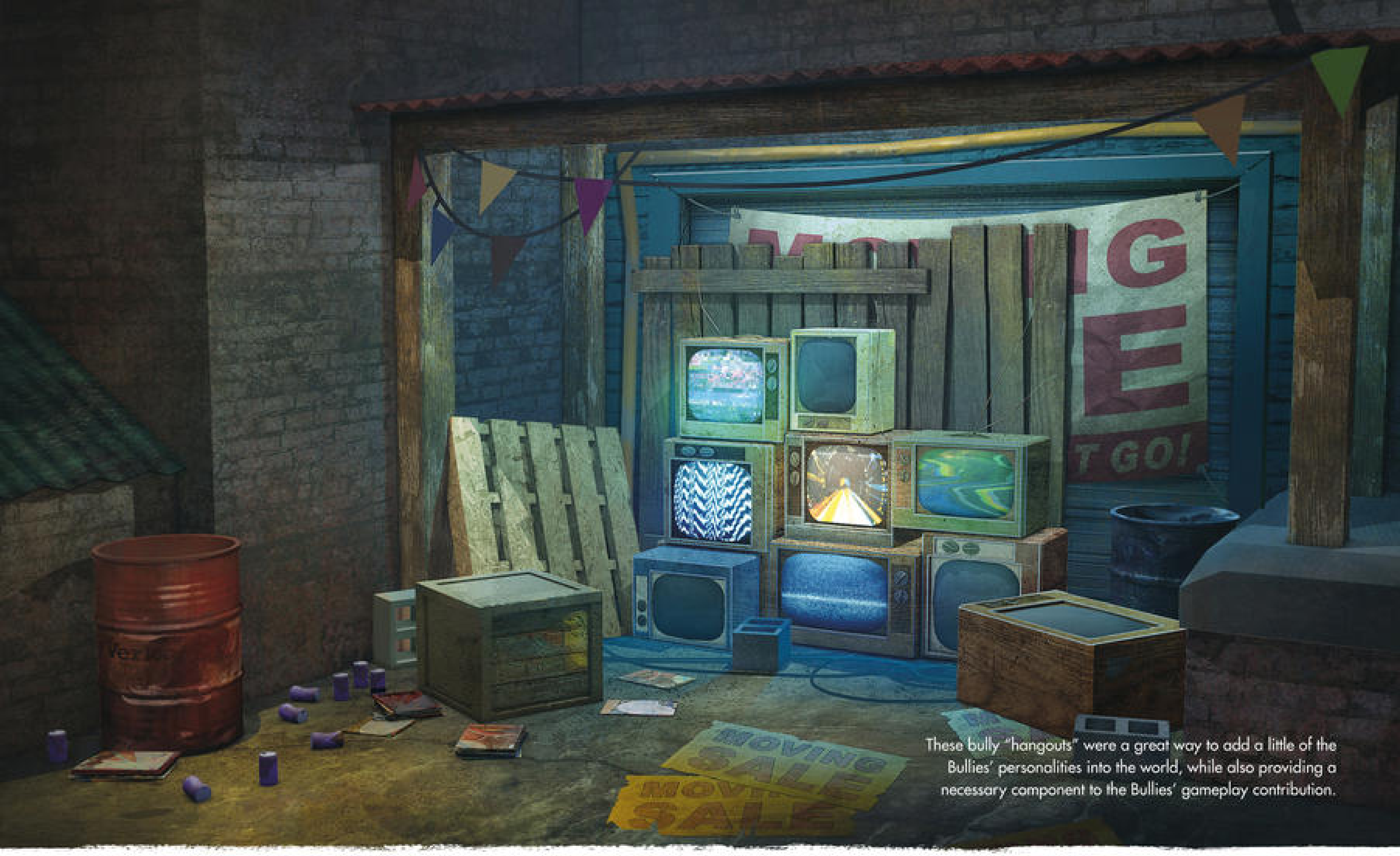

HOCKEY
SUPERTIRES
RADIALS
Chuck
JAniE
Froggy



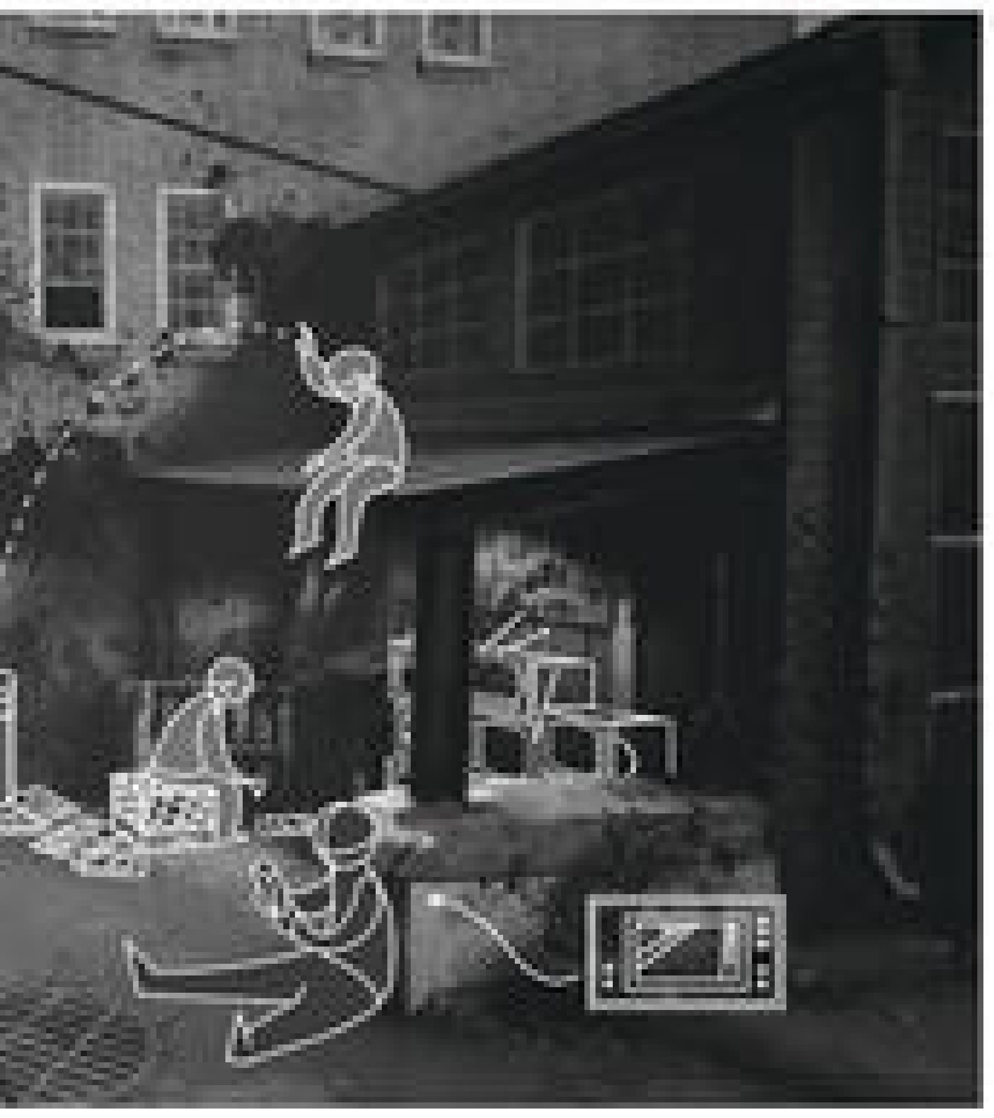


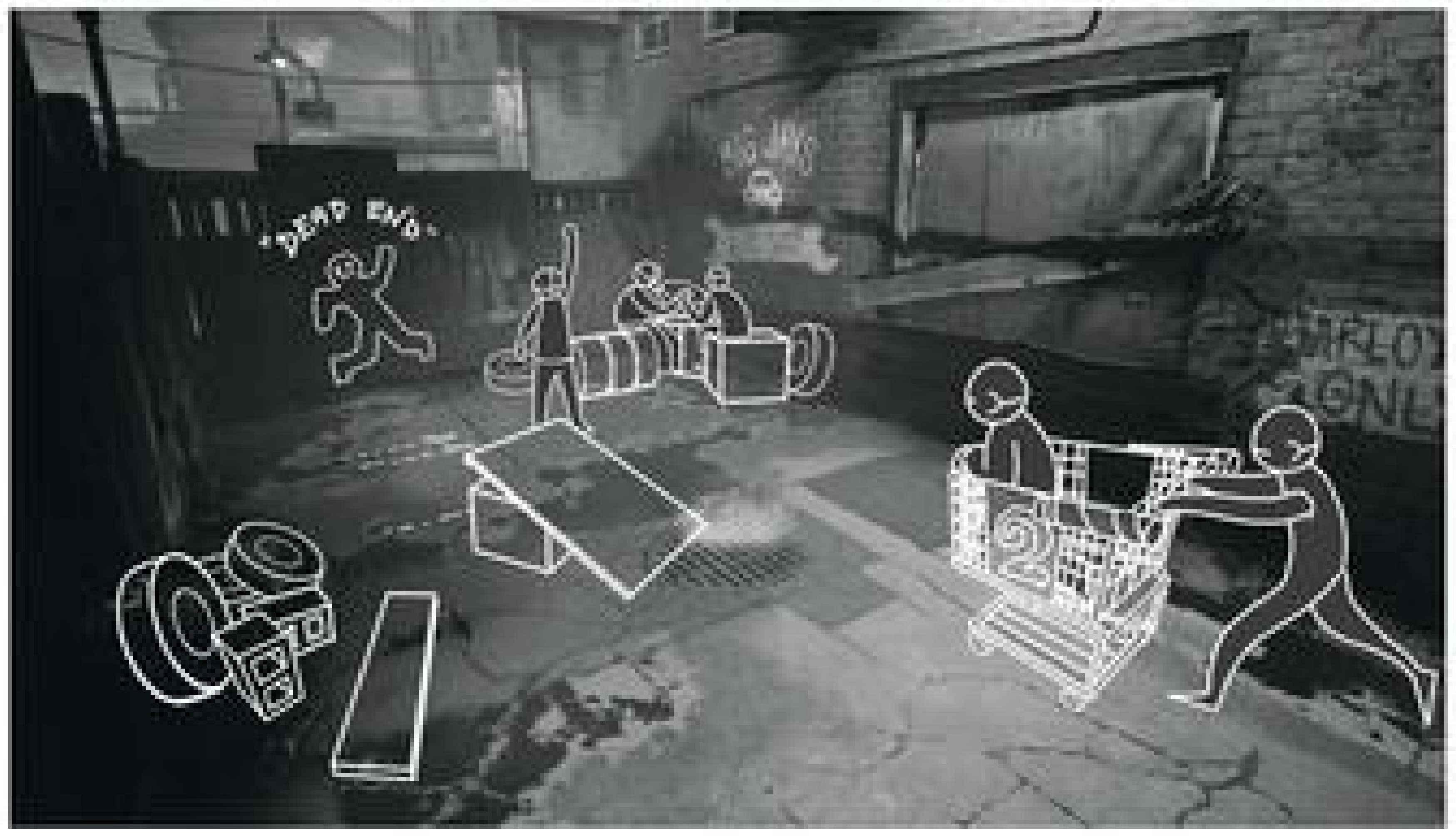


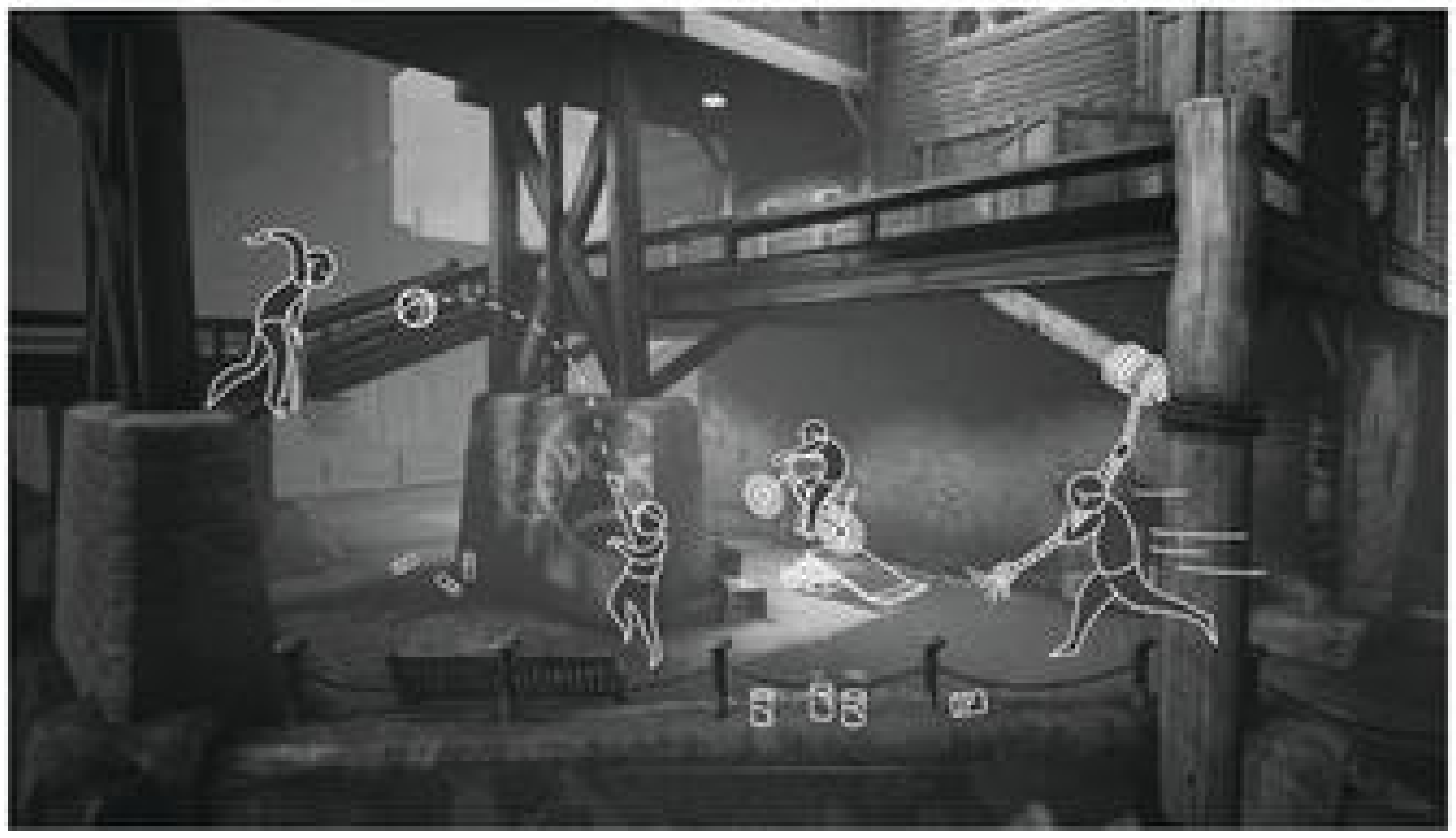
ARTIST TAYLOR LAMBERT (THIS PAGE AND FACING PAGE)

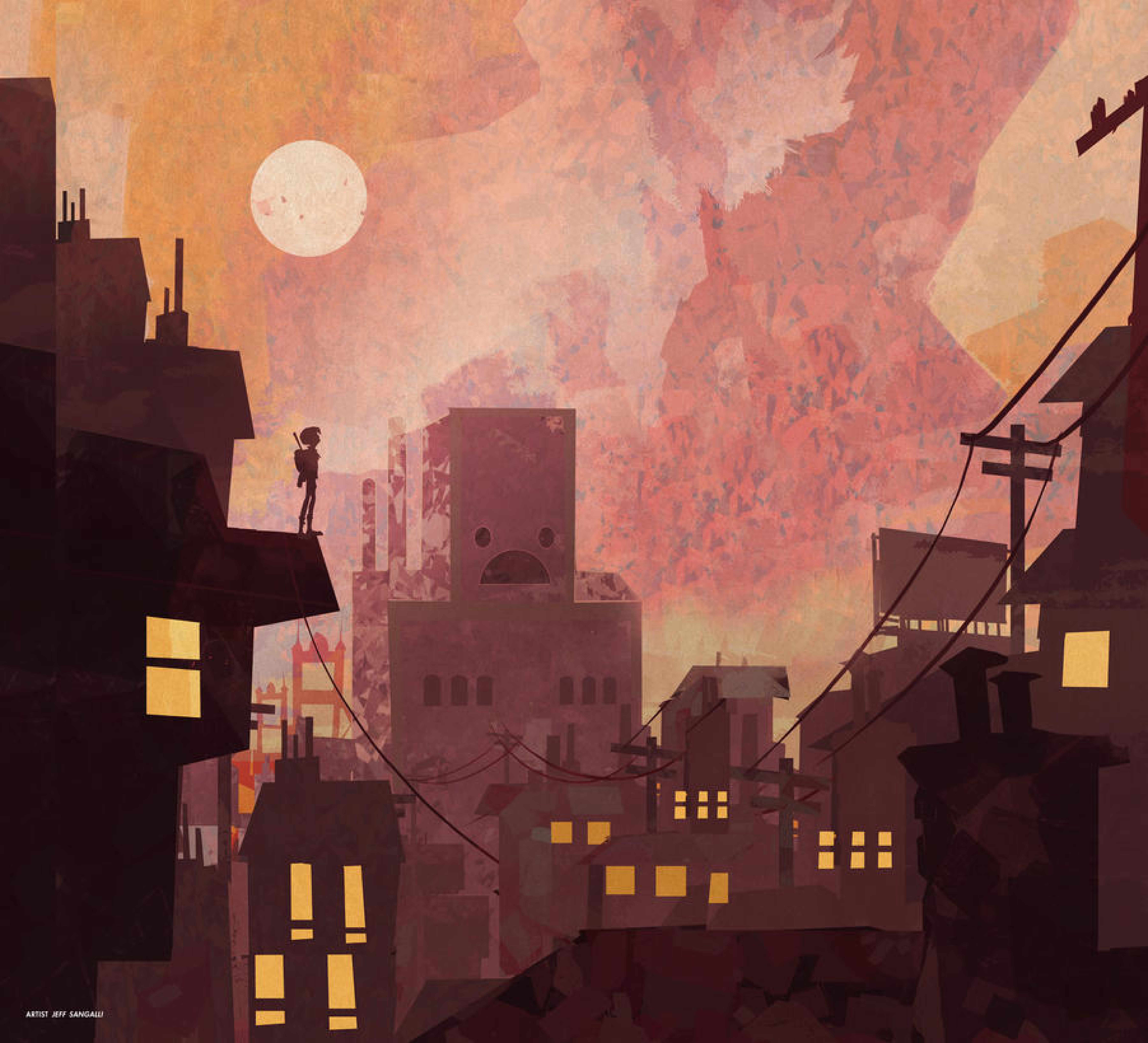

MOVING SALE
T GO!
MOVING SALE
MOVING SALE

These bully "hangouts" were a great way to add a little of the Bullies' personalities into the world, while also providing a necessary component to the Bullies' gameplay contribution.







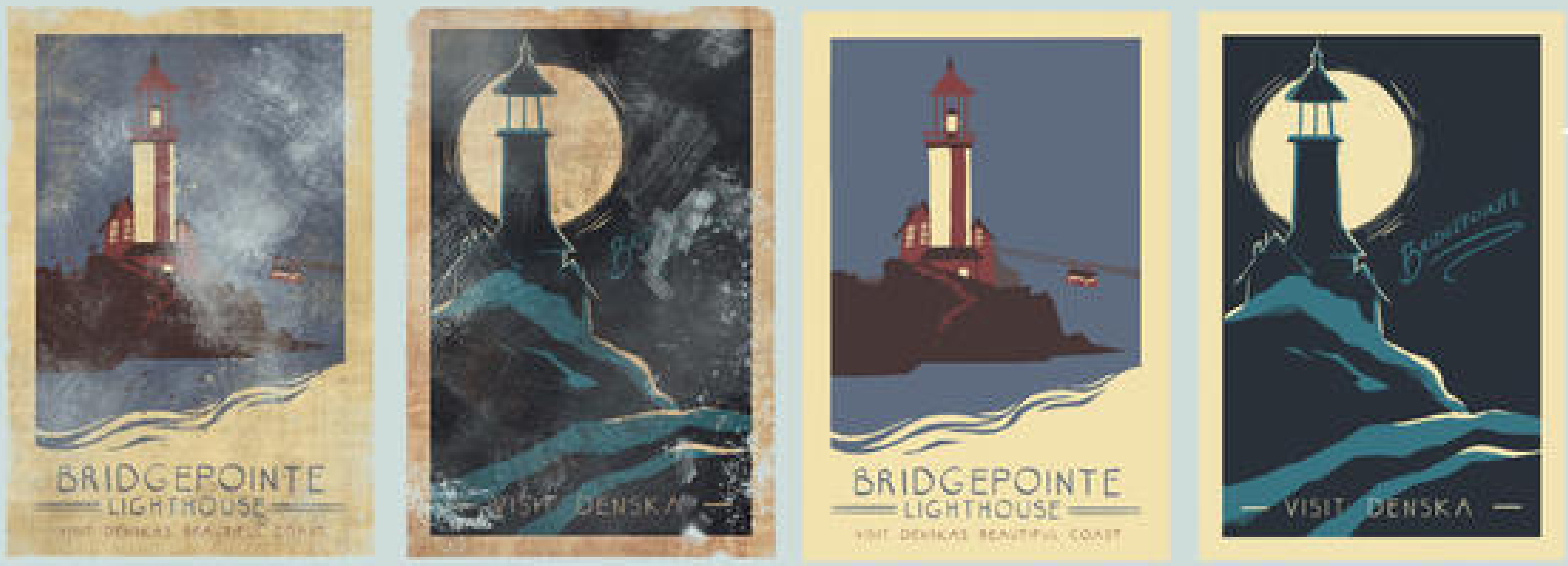


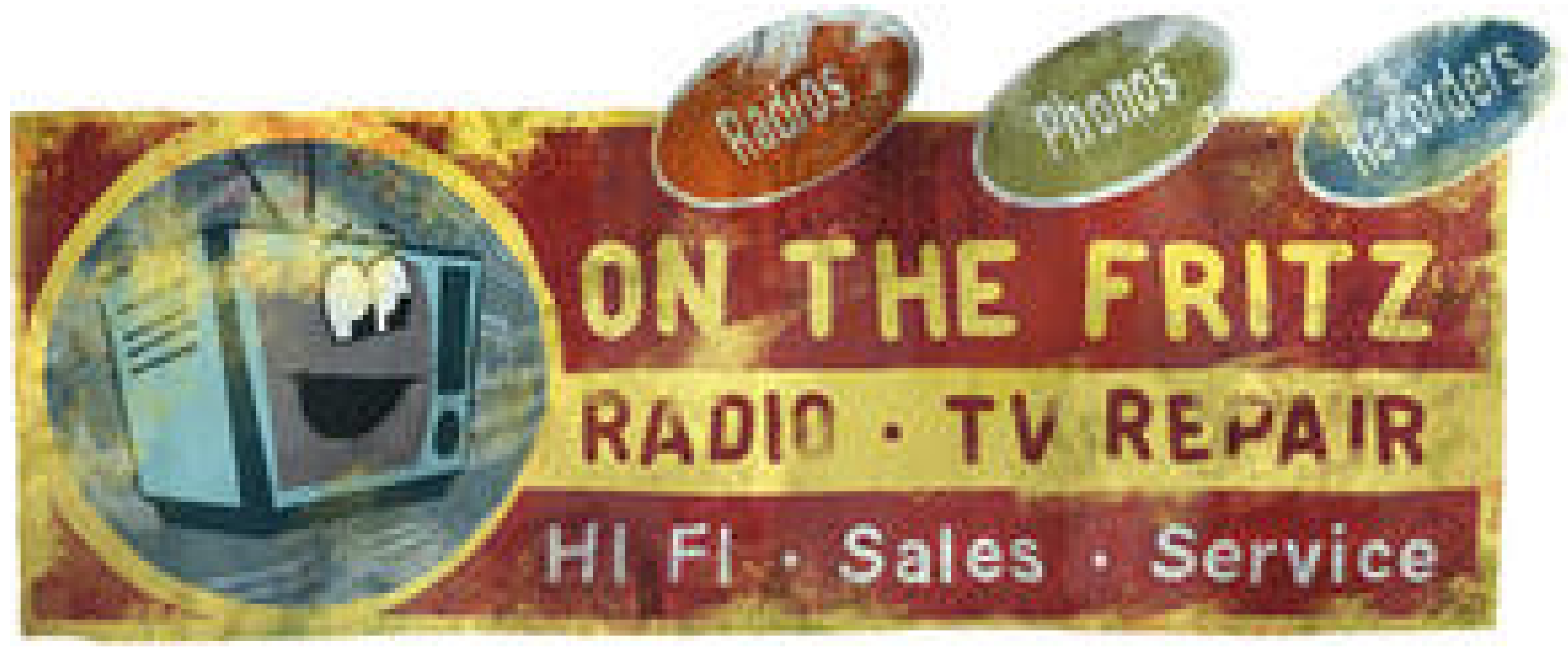
ARTIST *JEFF SANGALLI*

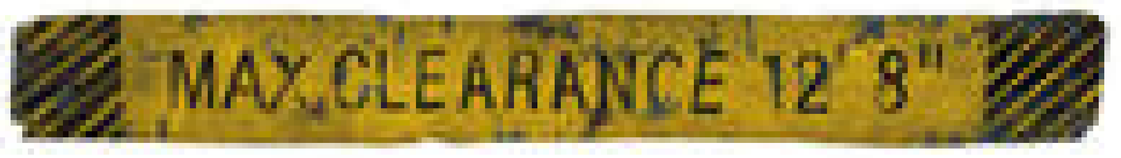
DENSKA POSTER

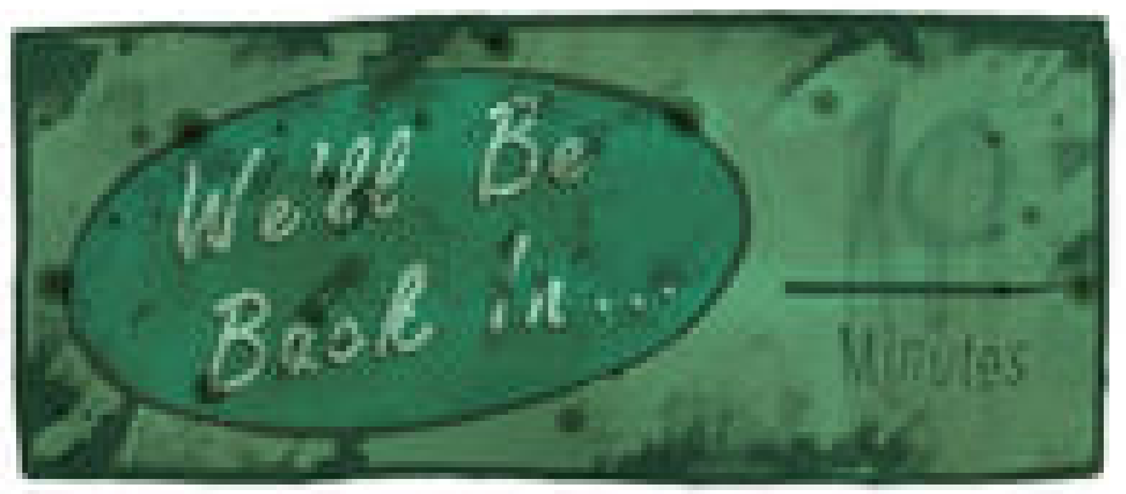
Every graphic design in the game is a unique hand-illustrated piece of art. We thought it would be fun to name the lighthouse location after our San Mateo address—Bridgepointe.

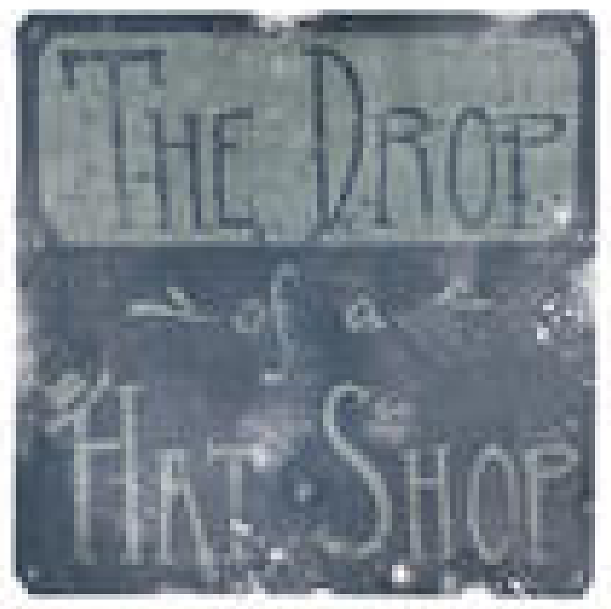
ARTIST MAAIKE SCHERFF (POSTERS)

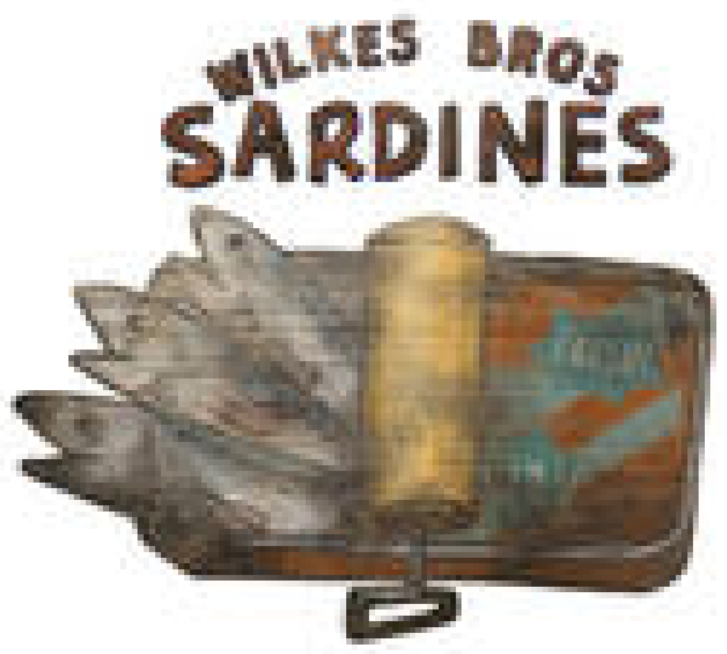

BRIDGEPOINTE
LIGHTHOUSE
VISIT DENSKA'S BEAUTIFUL COAST
VISIT DENSKA
Bridgepointe
BRIDGEPOINTE
LIGHTHOUSE
VISIT DENSKA'S BEAUTIFUL COAST
Bridgepointe
VISIT DENSKA

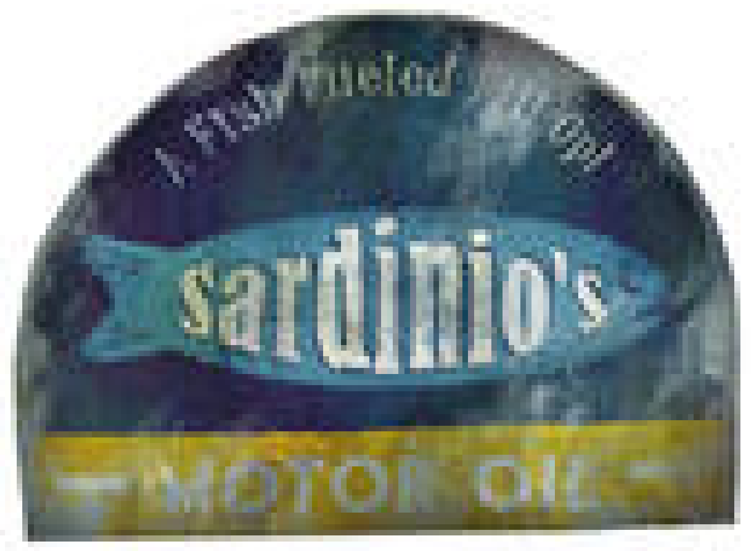

Radios
Phonos
Recorders
ON THE FRITZ
RADIO · TV REPAIR
HI FI · Sales · Service

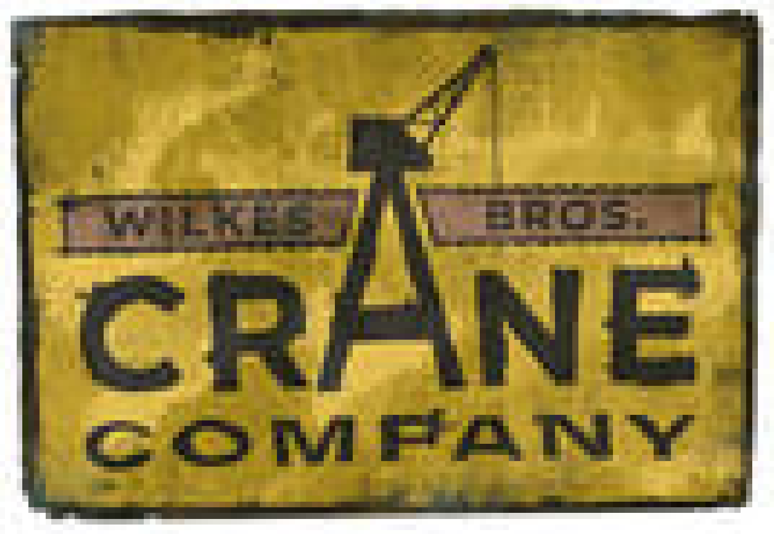

MAX CLEARANCE 12' 8"

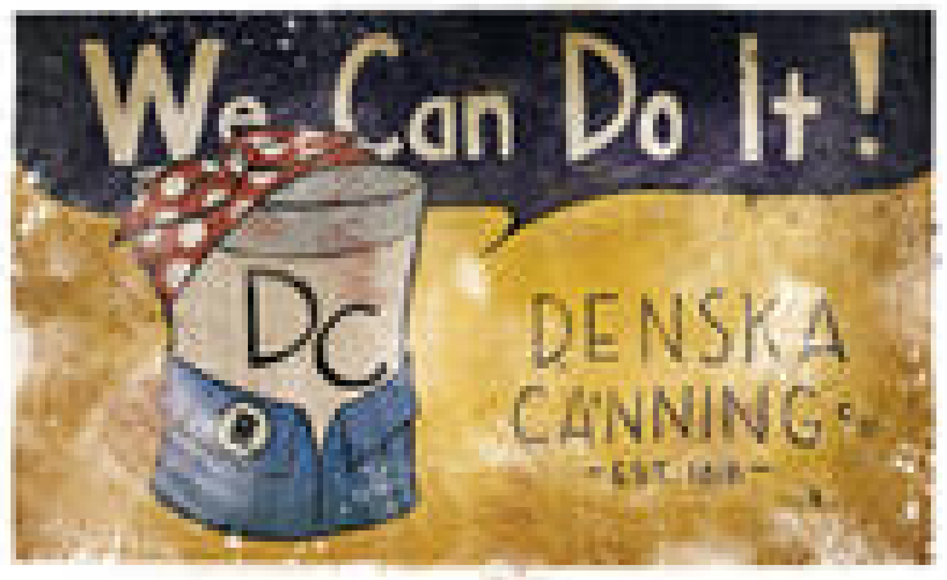

We'll Be Back in...
10
Minutes

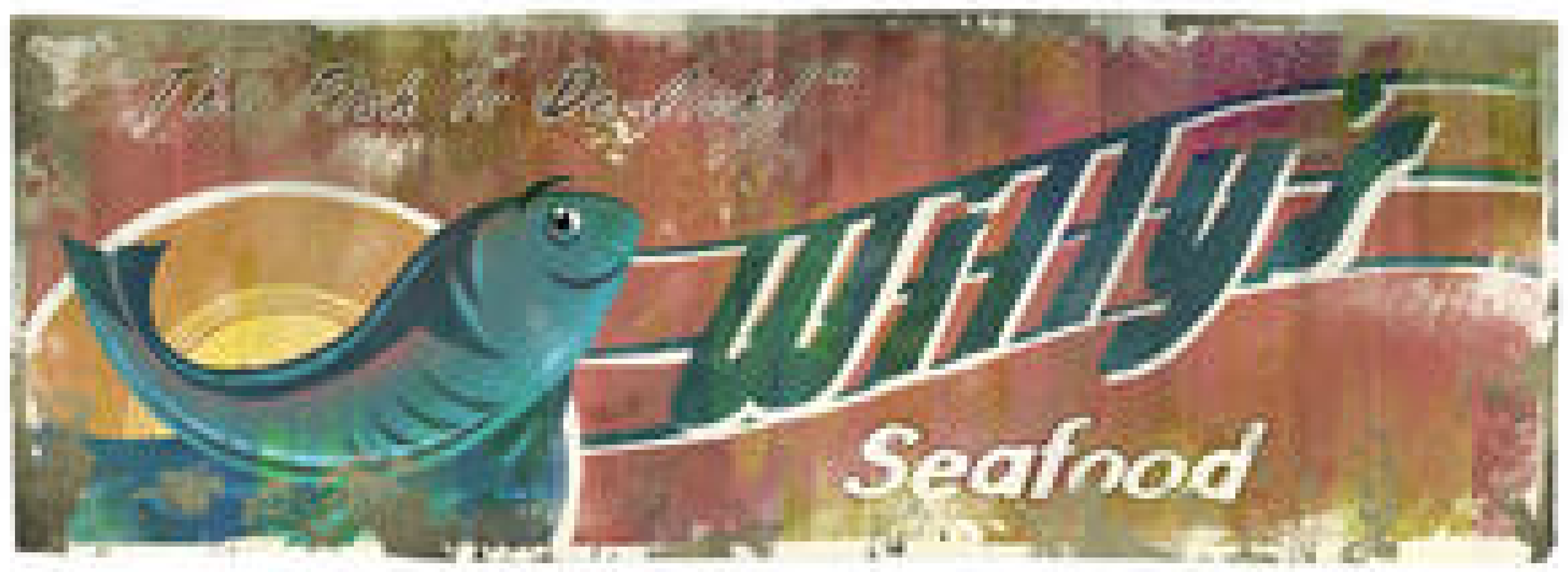

THE DROP of a HAT SHOP

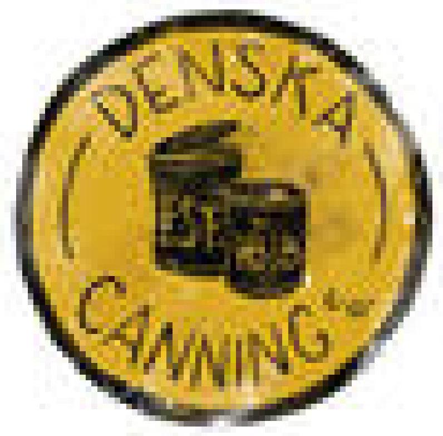

WILKES BROS
SARDINES

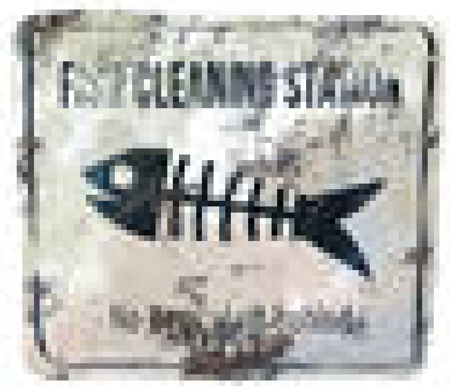

A Fish Fueled Oil
sardinio's
MOTOR OIL

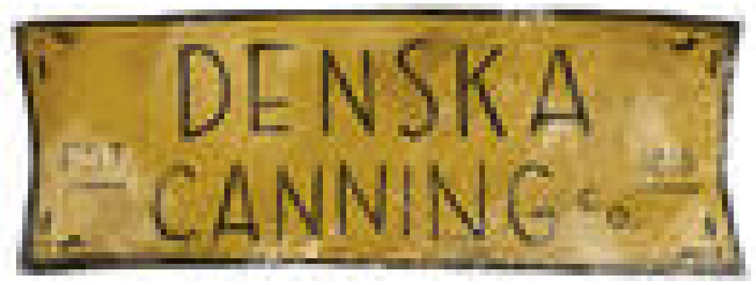

WILKES BROS.
CRANE
COMPANY

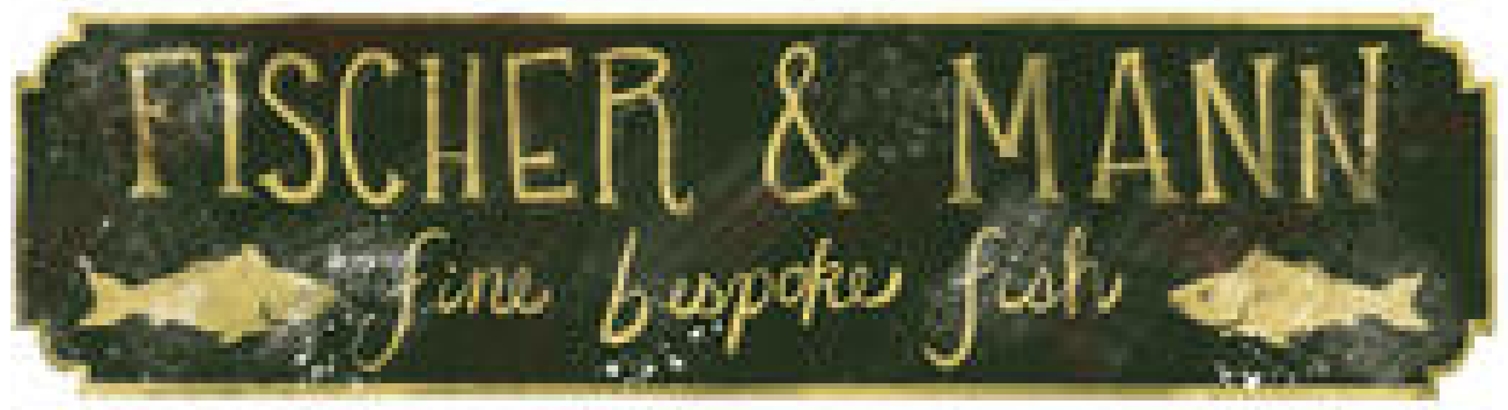

We Can Do It!
DC
DENSKA
CANNING Co.

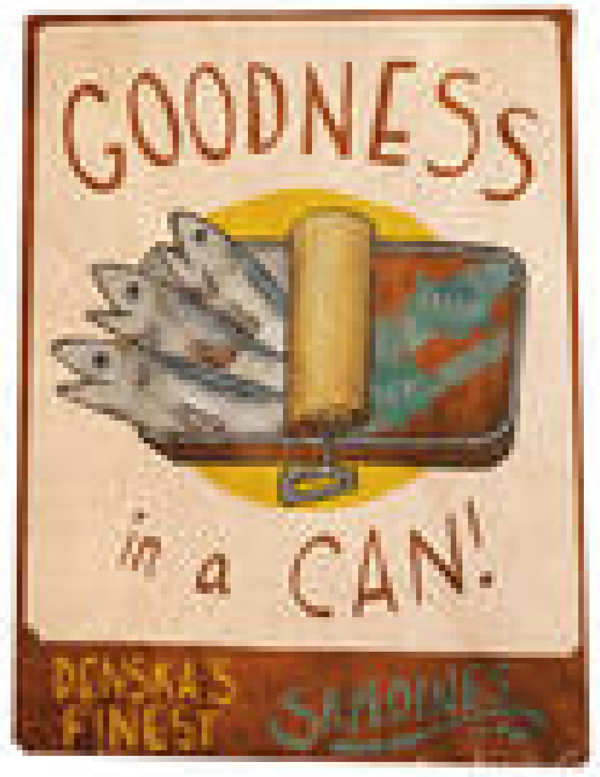


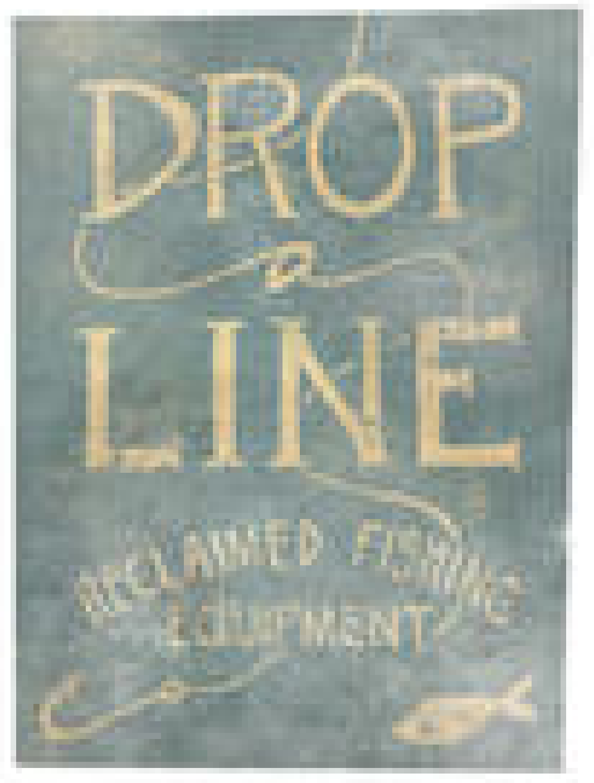

DENSKA
CANNING Co.


FISH CLEANING STATION


DENSKA
CANNING Co.


FISCHER & MANN
fine bespoke fish


GOODNESS
in a CAN!
DENSKA'S FINEST
SARDINES


DROP
a
LINE
RECLAIMED FISHING EQUIPMENT

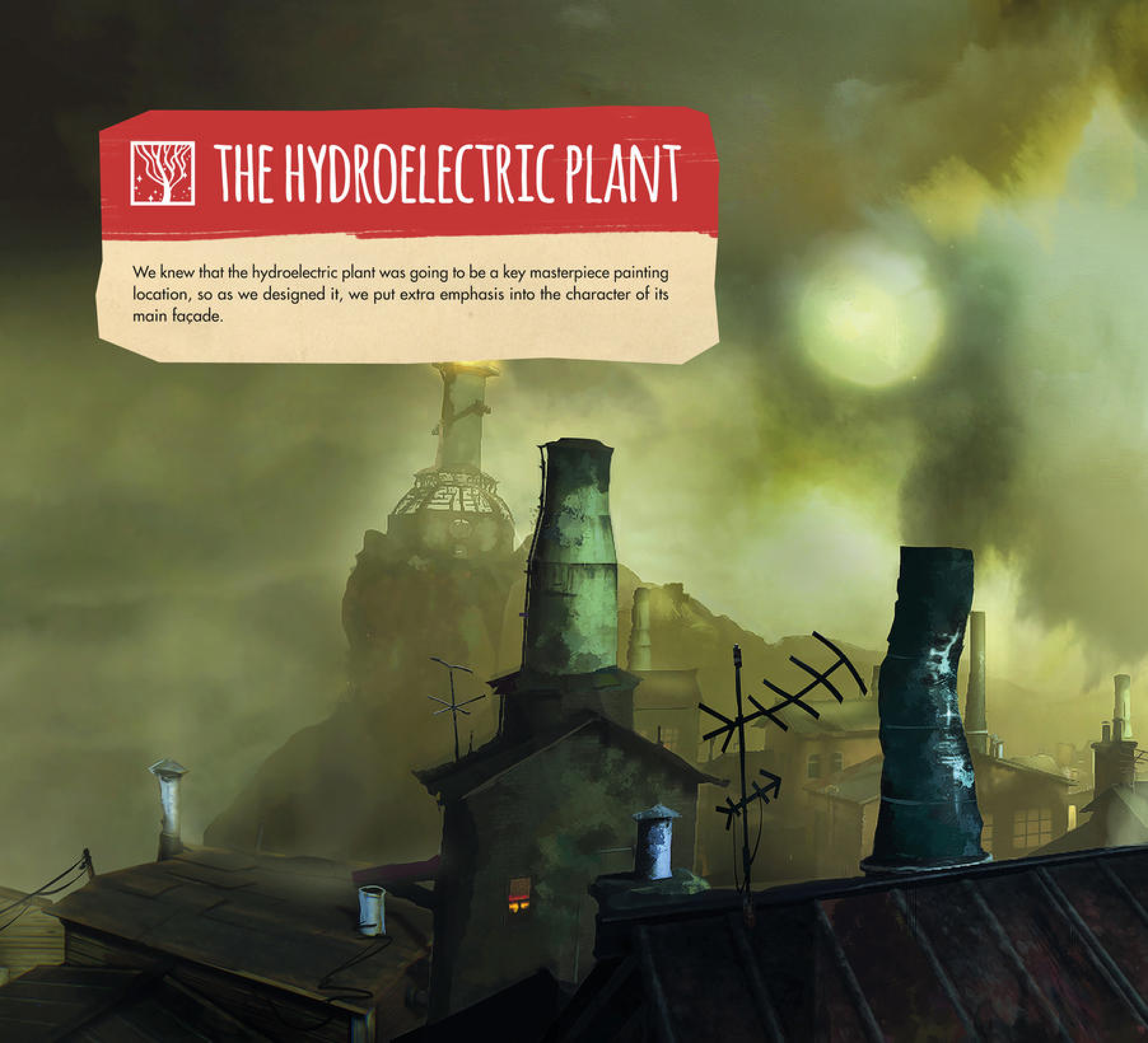
DENSKA SIGNS

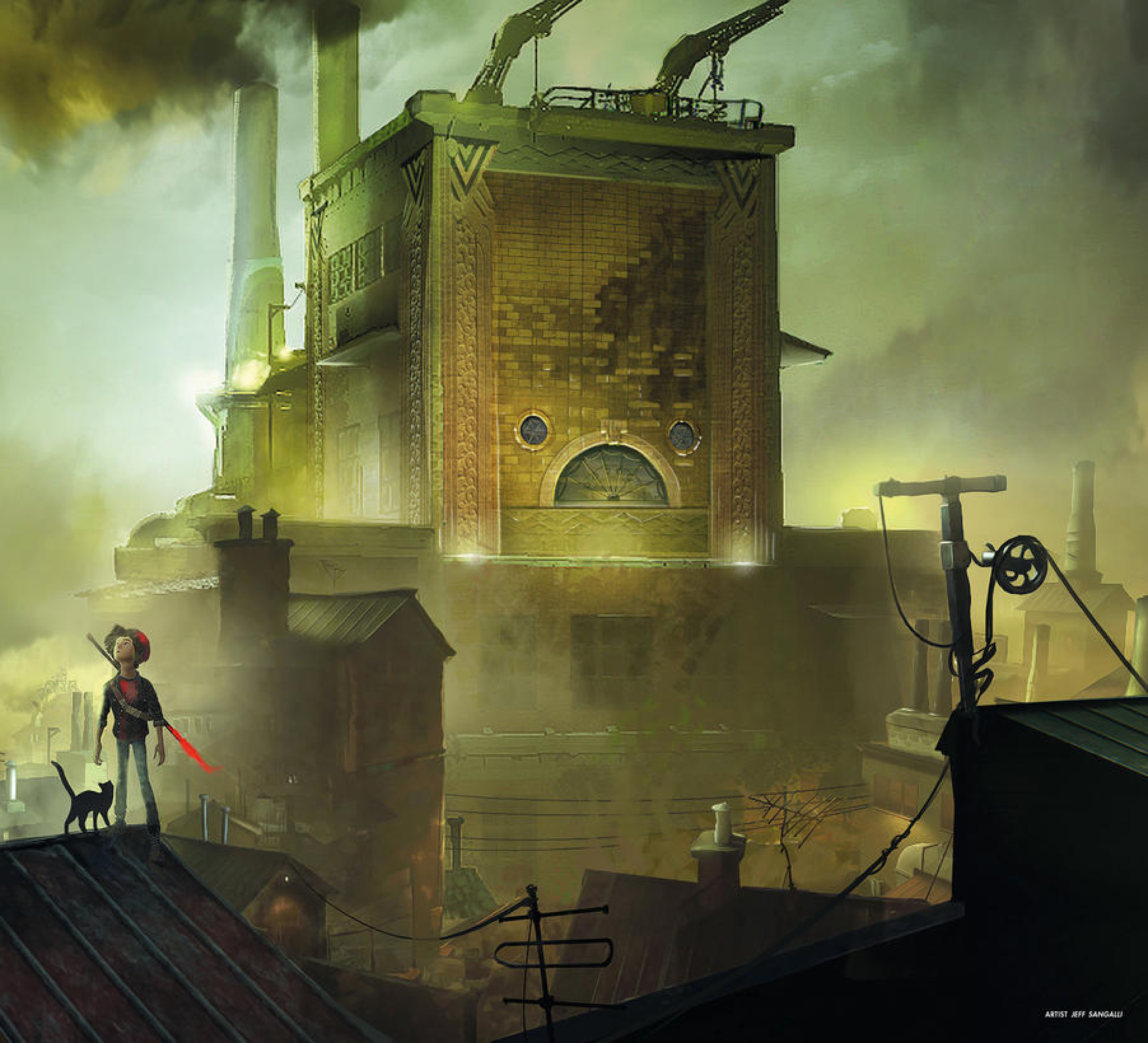
The variety of signs throughout Denska help add a good amount of authenticity to our fictional world, providing backstory to the life and time of the people that called Denska home.

ARTISTS TAYLOR LAMBERT AND MAAIKE SCHERFF (SIGNS)

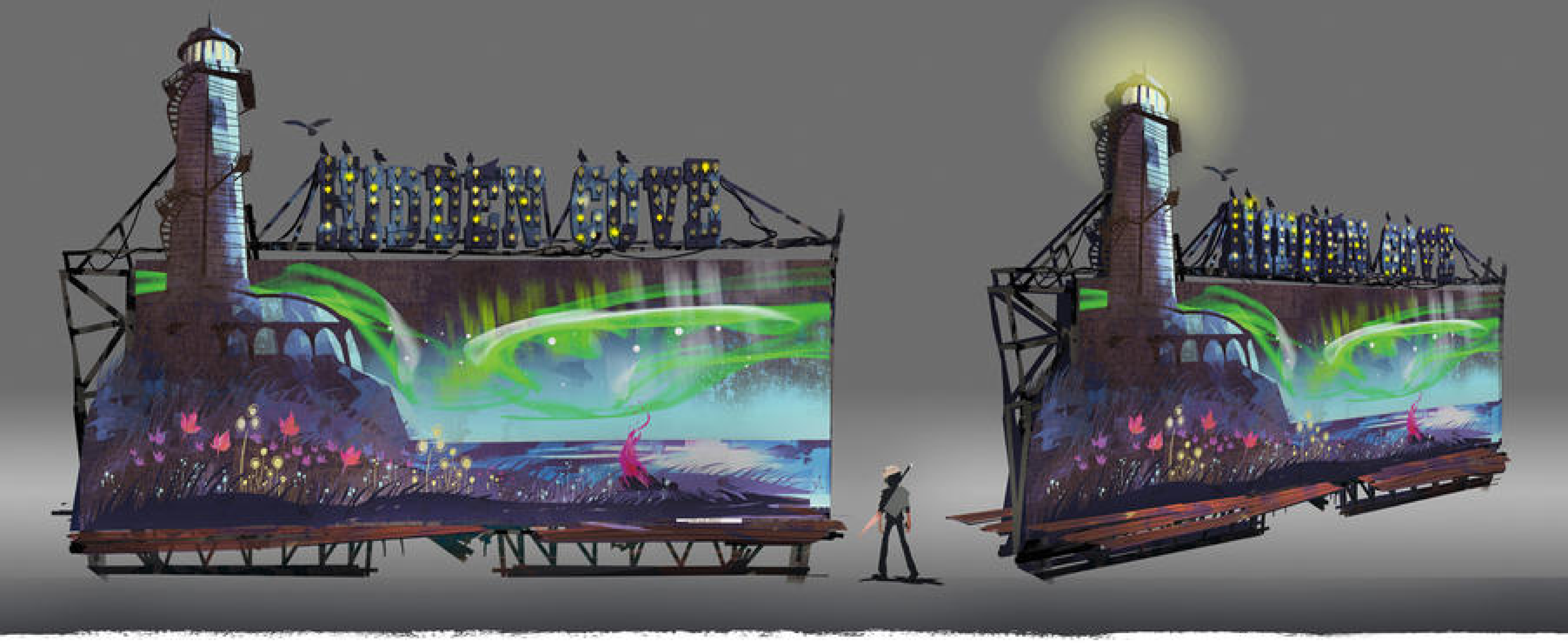
THE HYDROELECTRIC PLANT

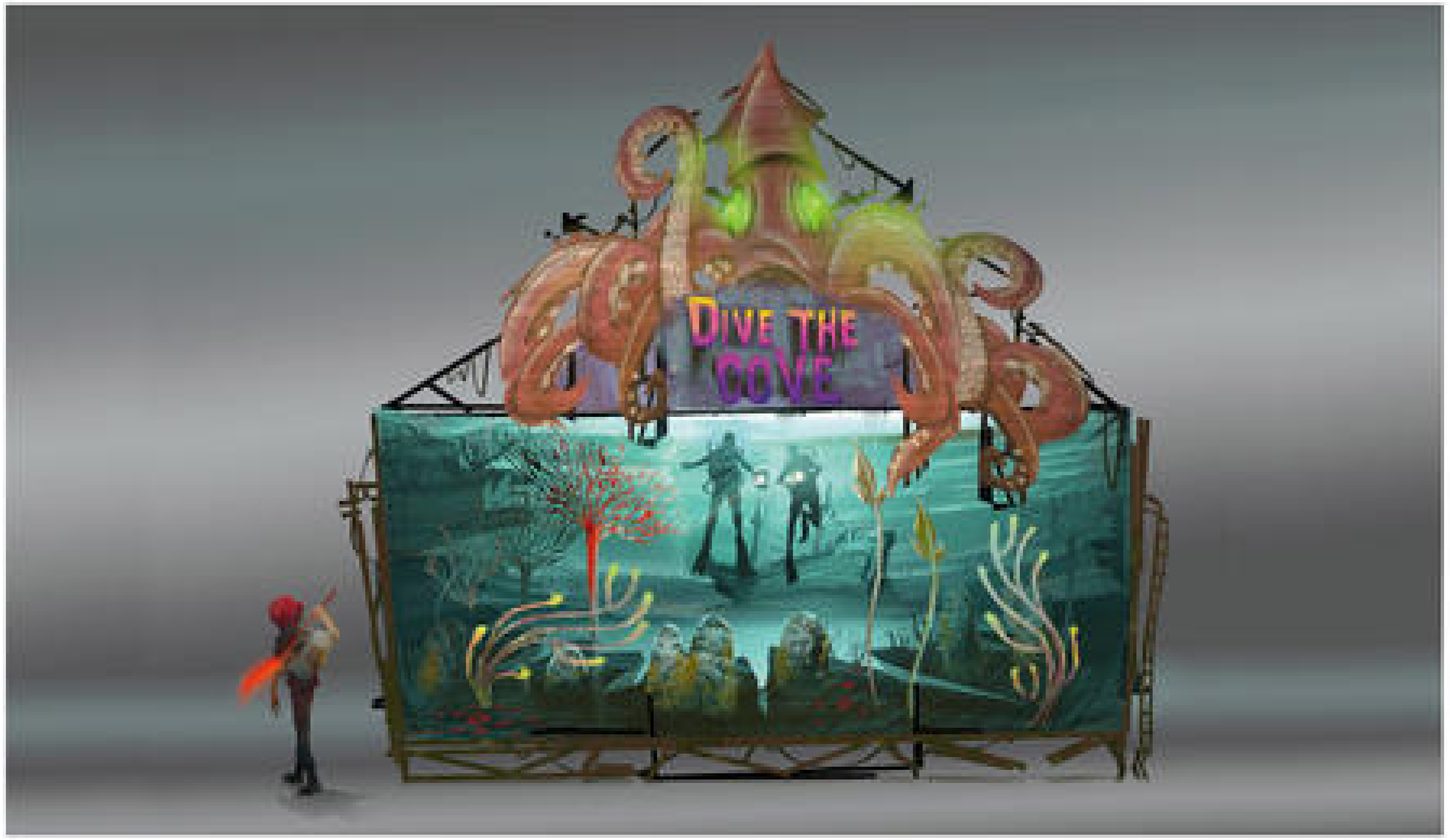
We knew that the hydroelectric plant was going to be a key masterpiece painting location, so as we designed it, we put extra emphasis into the character of its main façade.

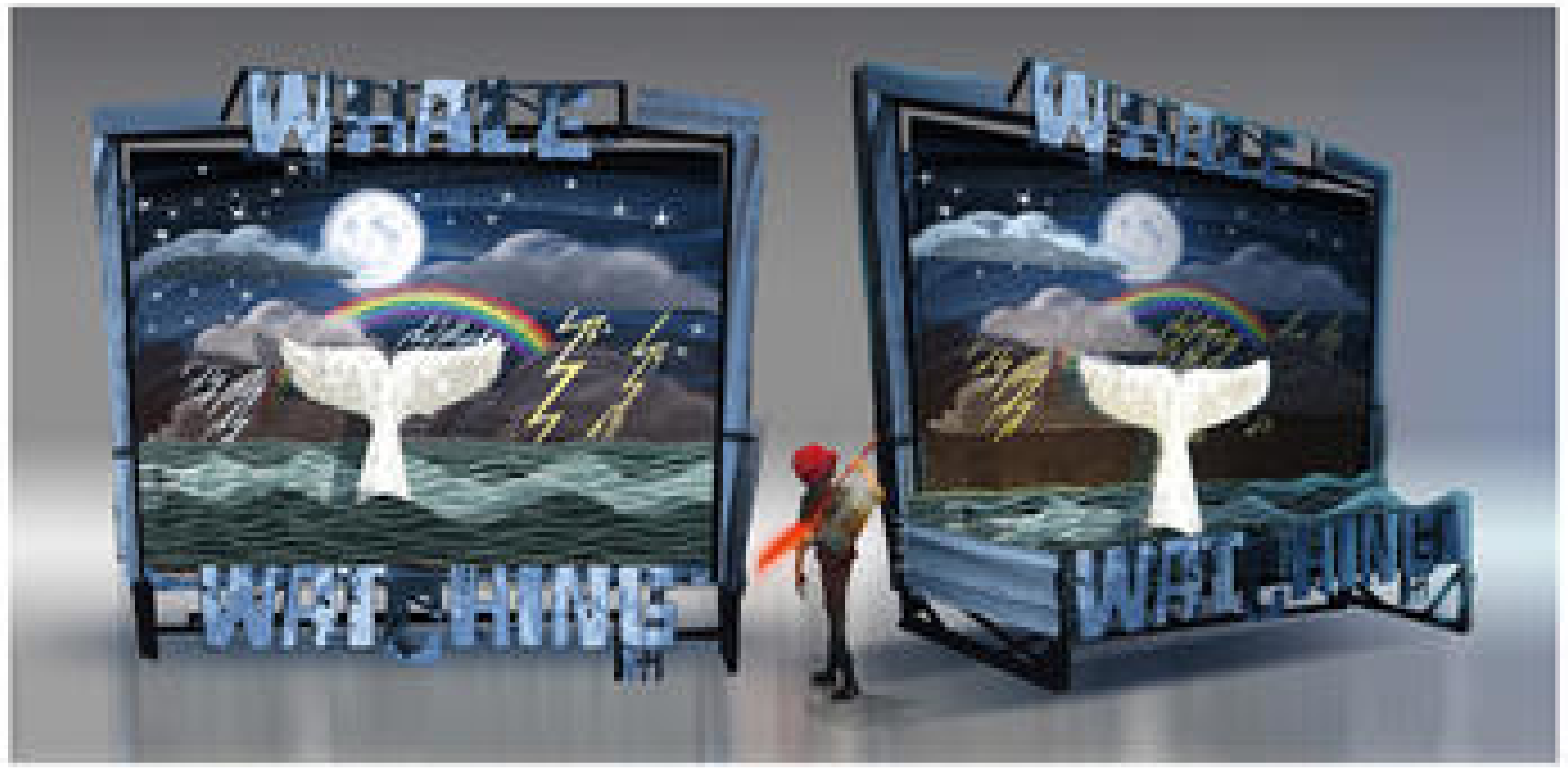


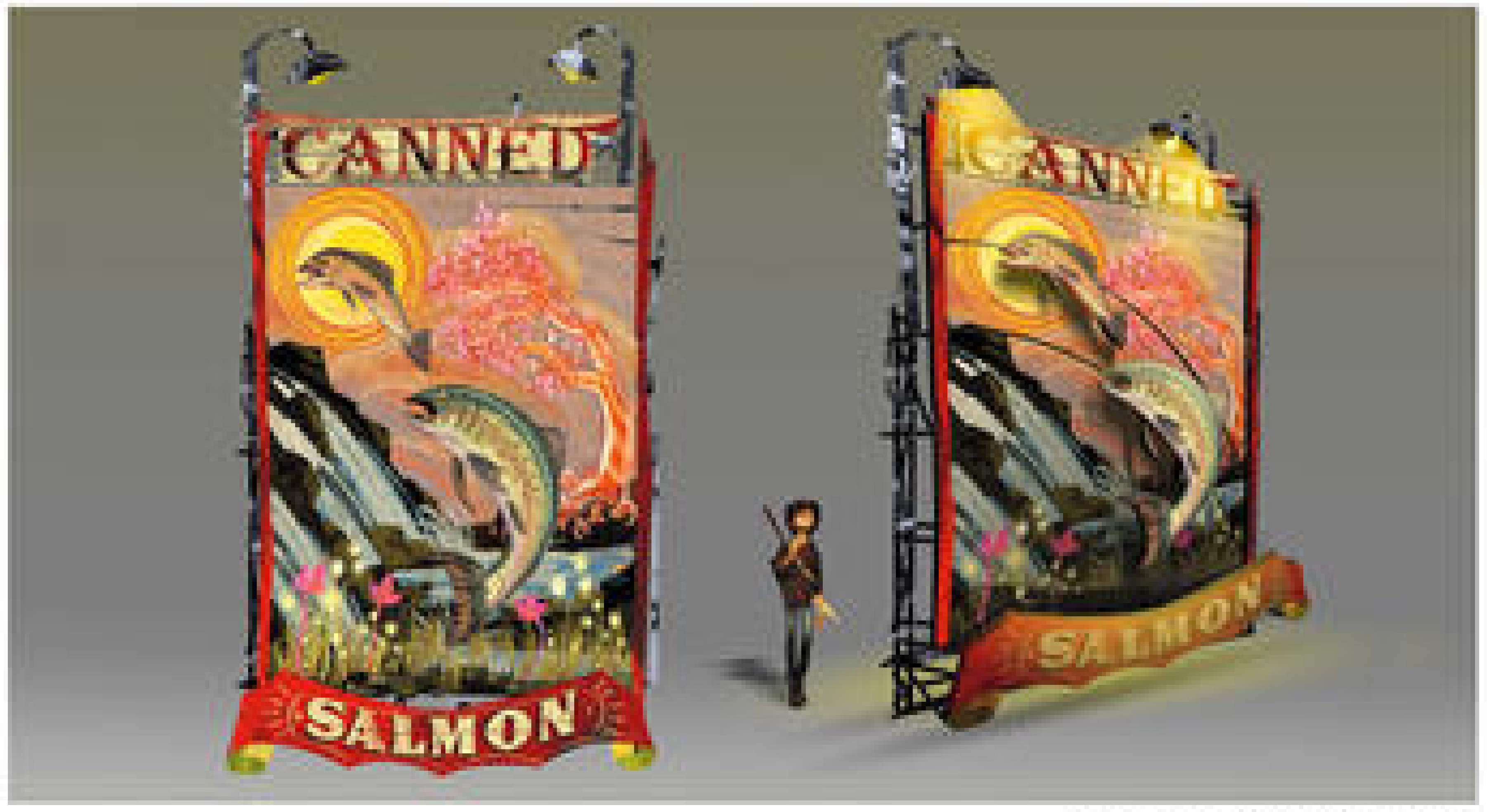


ARTIST JEFF SANGALLI


HIDDEN COVE
HIDDEN COVE


DIVE THE COVE

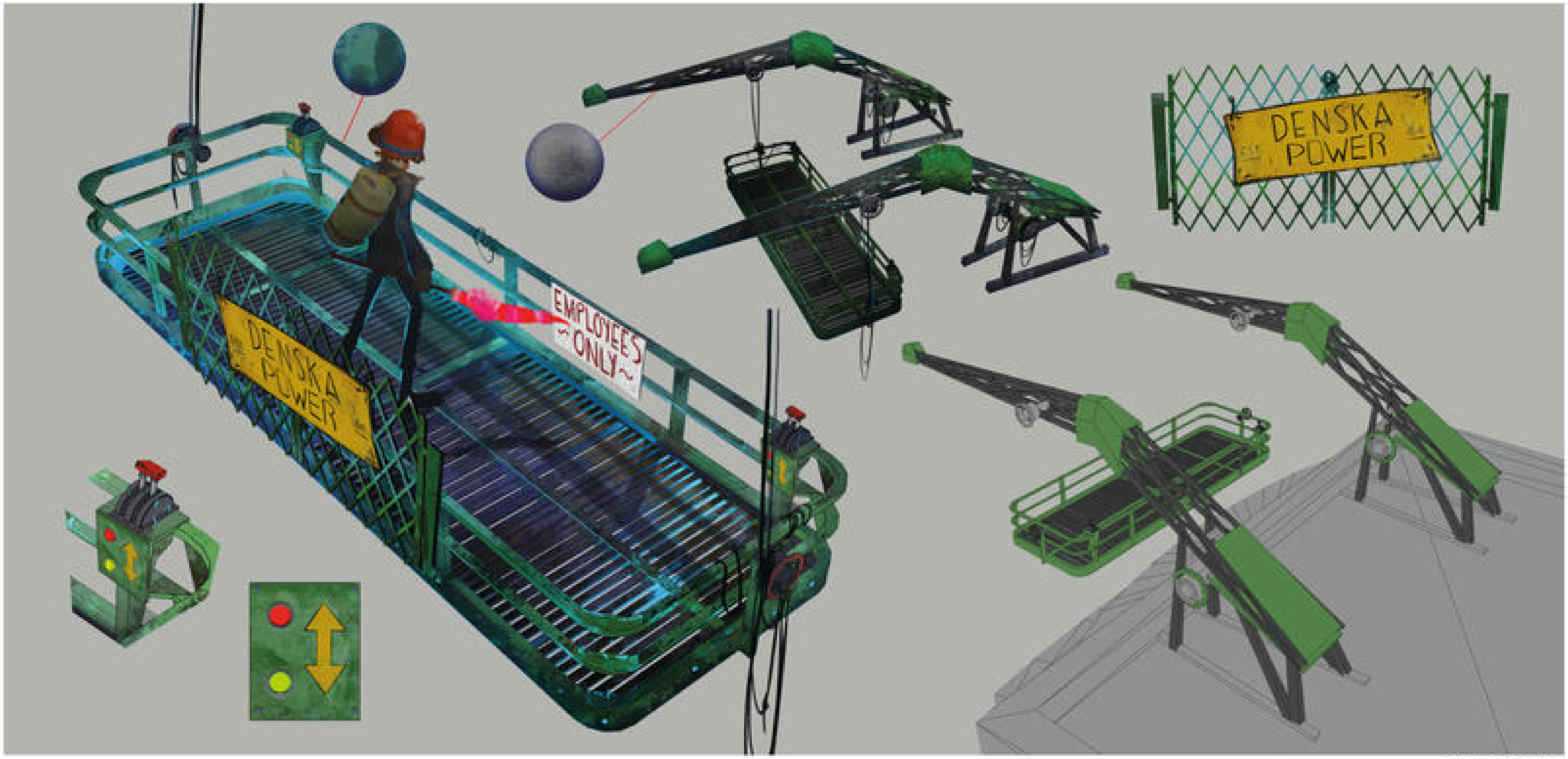

WHALE WATCHING
WHALE WATCHING


CANNED SALMON
CANNED SALMON

PROP DESIGN CONCEPT

Later on in level development we came up with a new painting puzzle idea we called "mini pieces" theses were conceived as dilapidated billboards that could refer to world building and backstory ideas for Denska. The player then has to use specific designs on them to "complete" them and fix them.

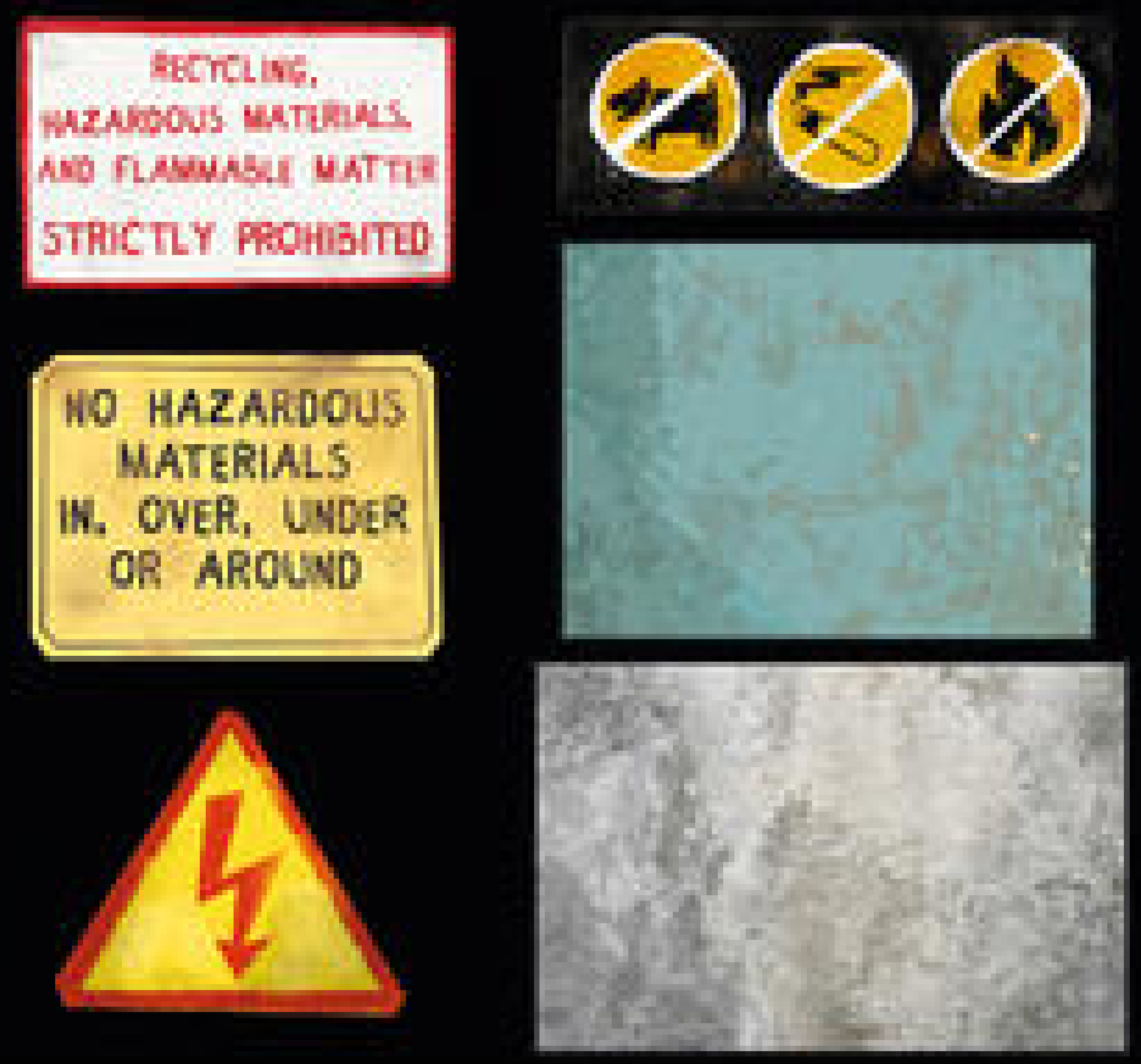
ARTIST JEFF SANGALLI (THIS PAGE)

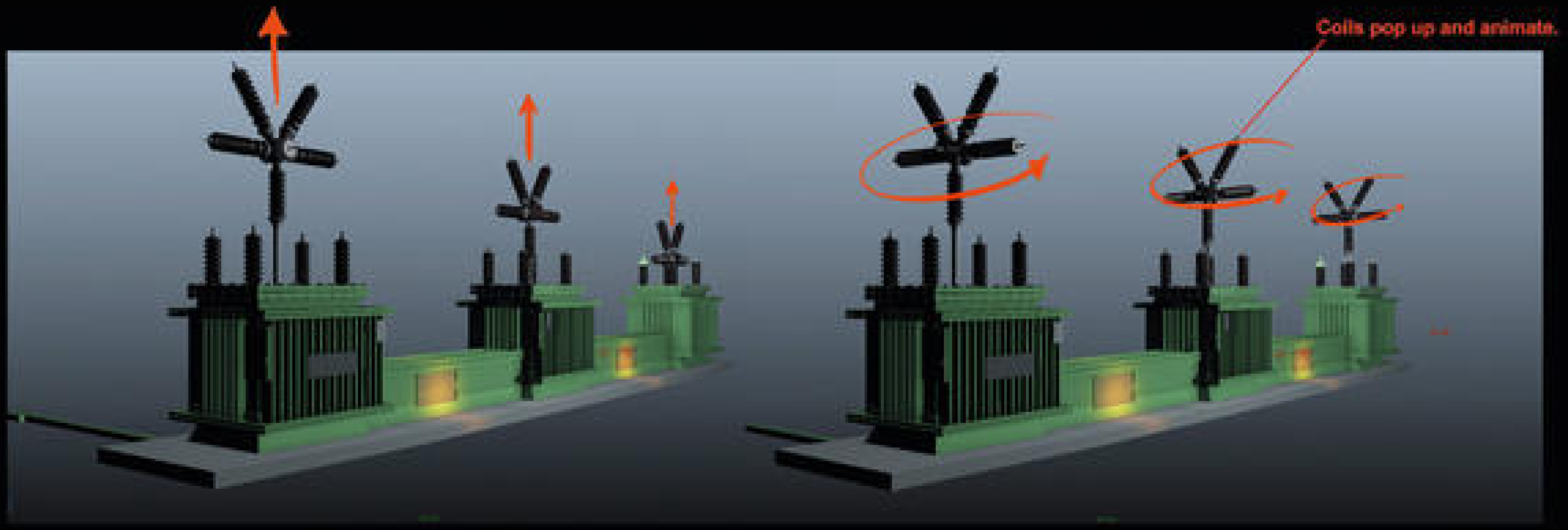

DENSKA POWER
DENSKA POWER
EMPLOYEES ~ONLY~
DENSKA POWER

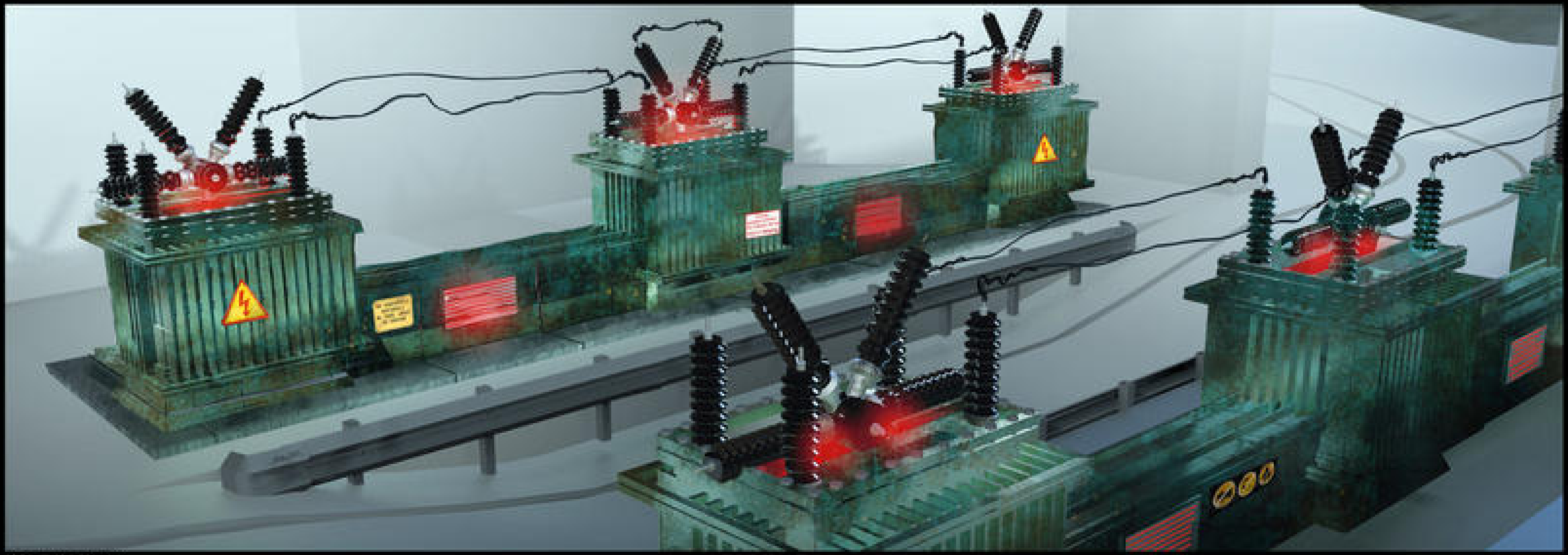
ARTIST JEFF SANGALLI

The crane was designed as a level showcase to make for some dramatic platforming as Ash makes his way to the level finale. This top piece is a good example of a "level packet" that Jeff would deliver to the environment artists.

ARTIST TAYLOR LAMBERT


RECYCLING, HAZARDOUS MATERIALS, AND FLAMMABLE MATTER STRICTLY PROHIBITED
NO HAZARDOUS MATERIALS IN, OVER, UNDER OR AROUND

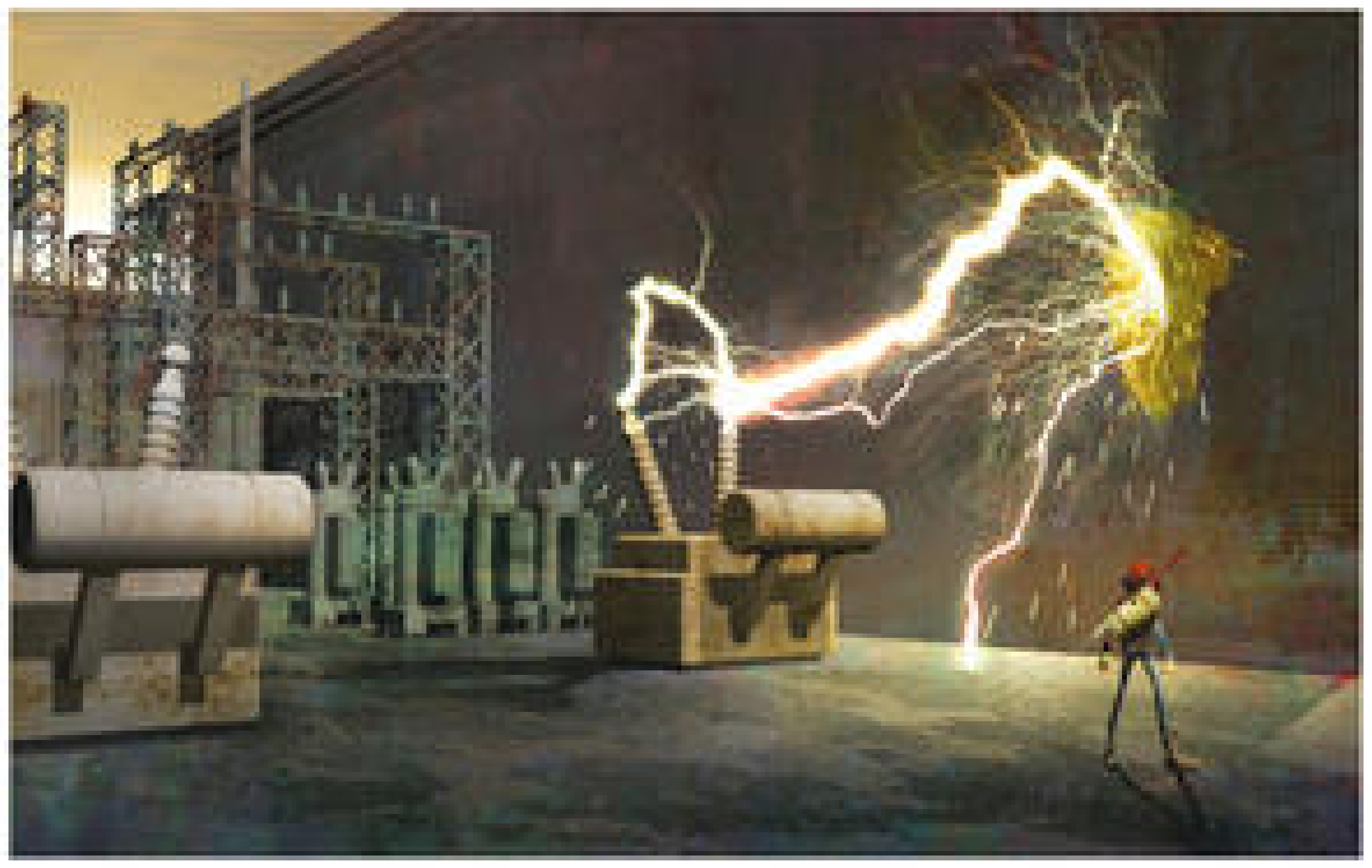

Coils pop up and animate.

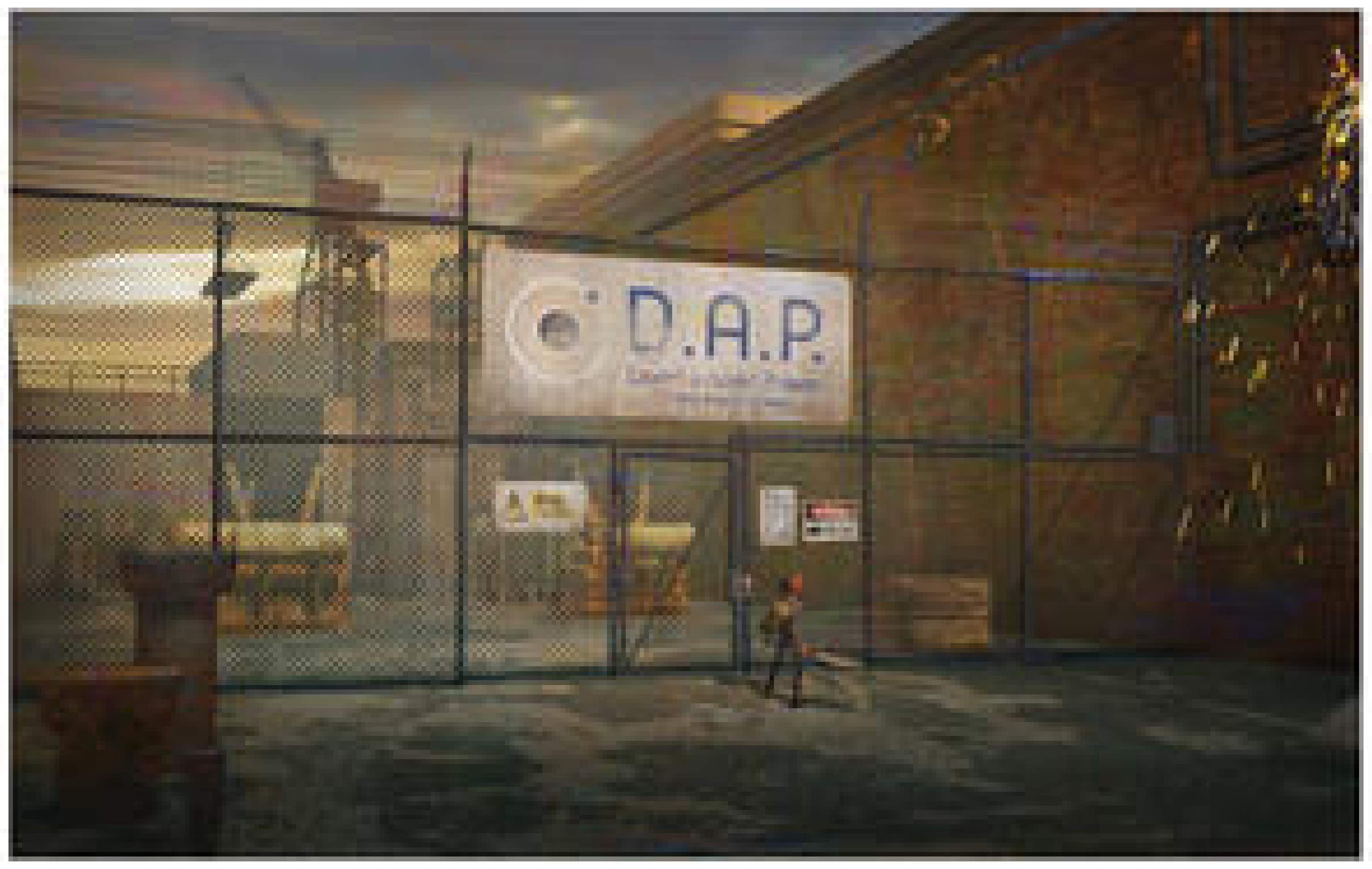

ARTIST JEFF SANGALLI

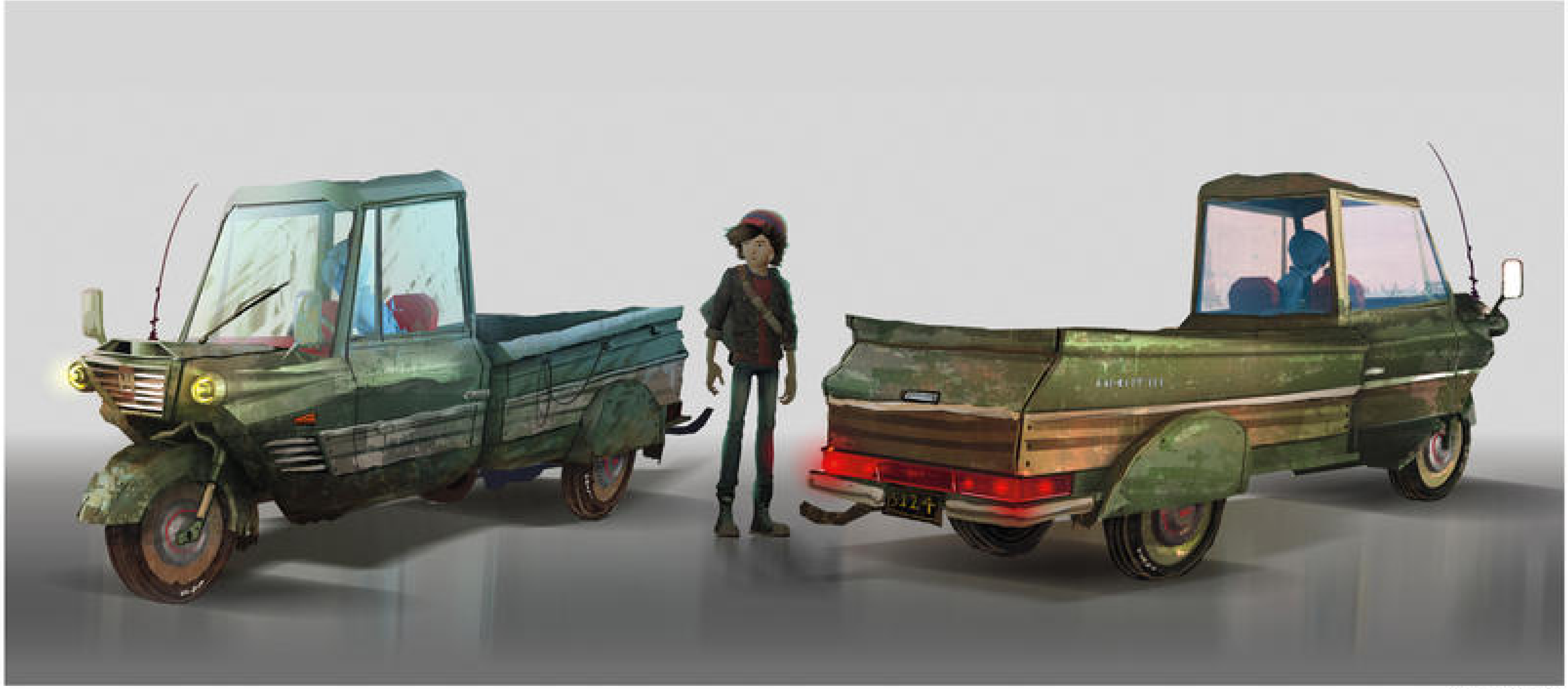
POWER STATION

These pieces helped flesh out a level-design puzzle that was complex and had a lot of moving parts.

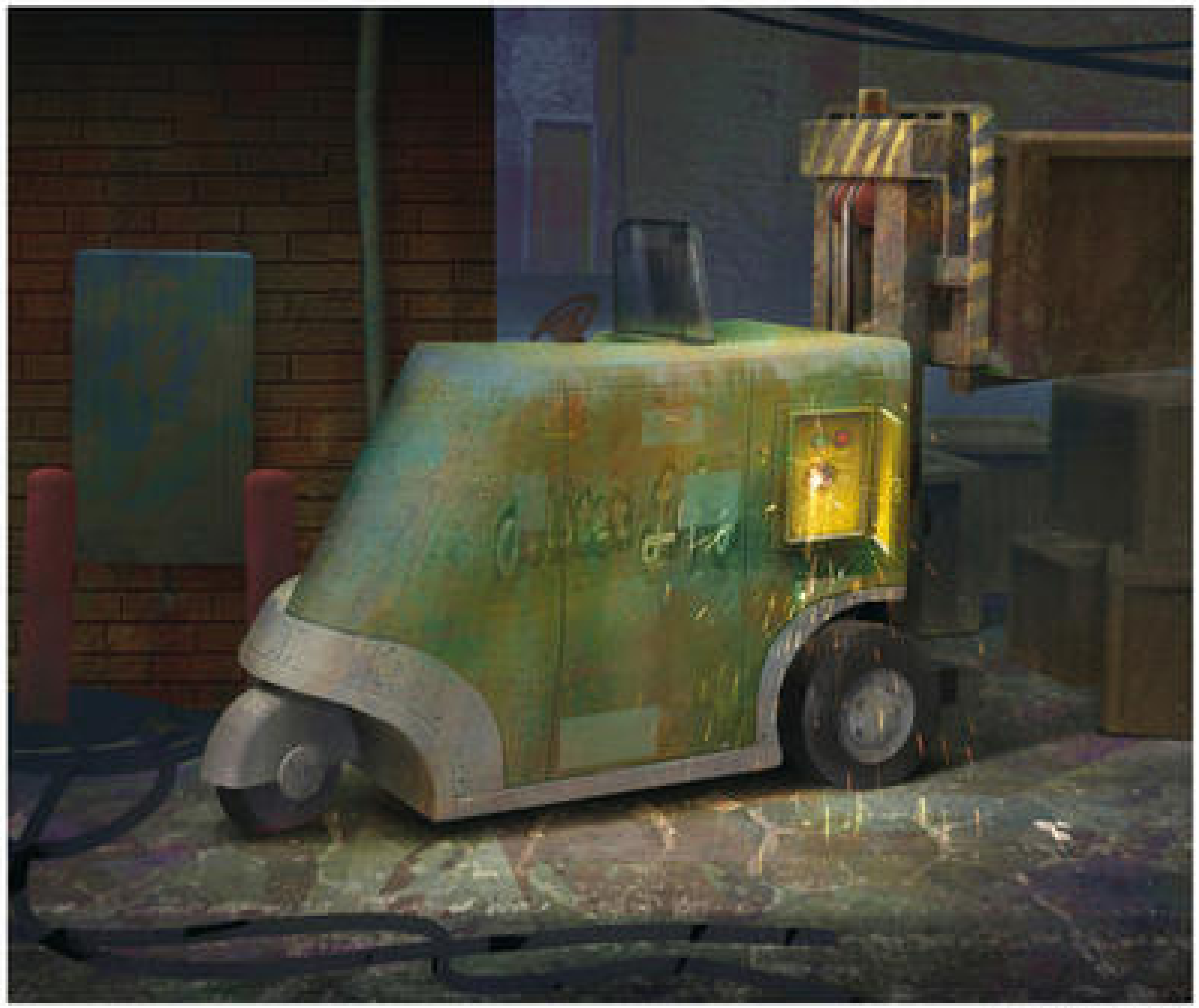
ARTIST TAYLOR LAMBERT (LEFT AND RIGHT)







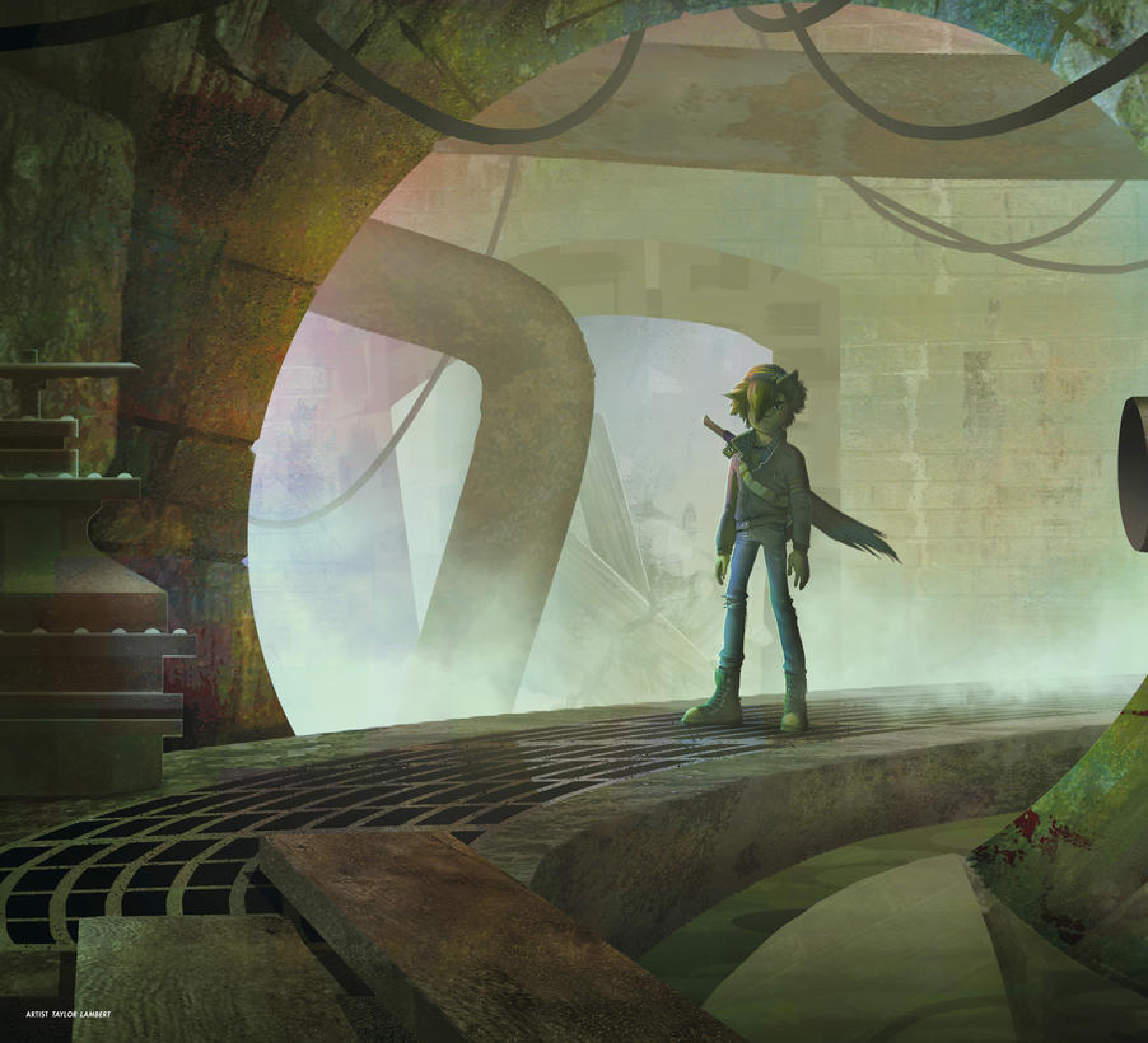
ARTIST JEFF SANGALLI



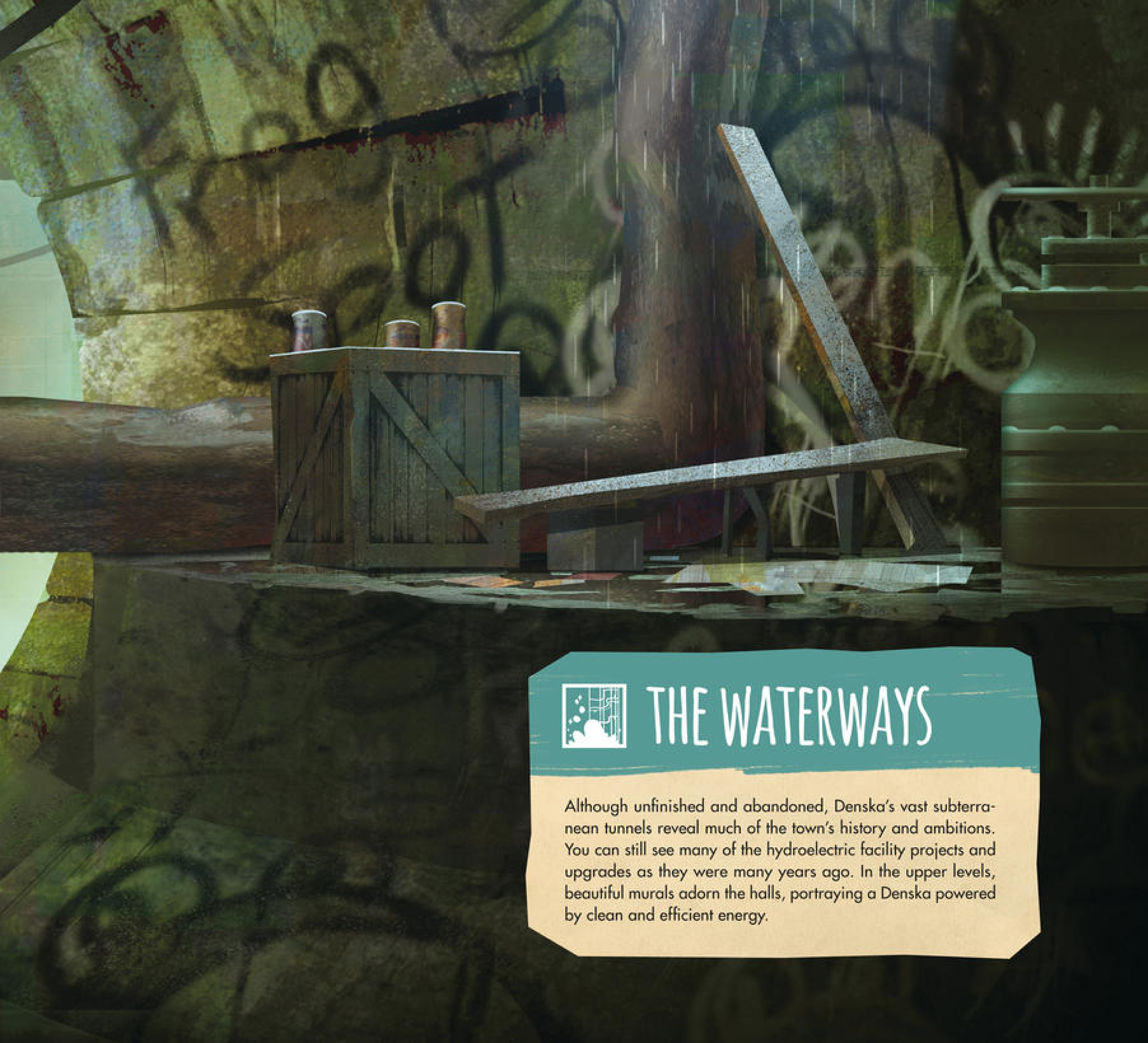
ARTIST TAYLOR LAMBERT

ARTIST DANIEL WILKES

It was fun to design unique vehicles for the world of Denska such as these three-wheeled carts and fork lifts.

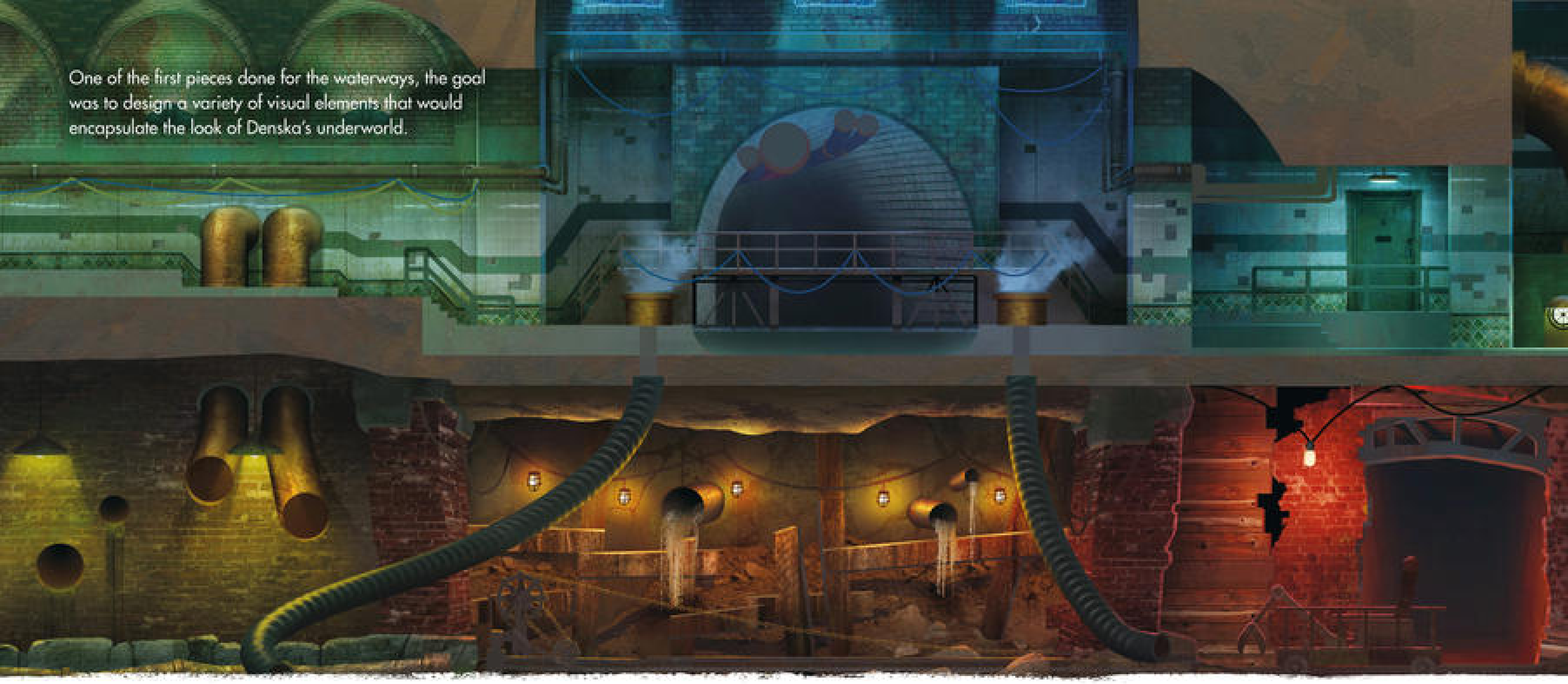


ARTIST *TAYLOR LAMBERT*

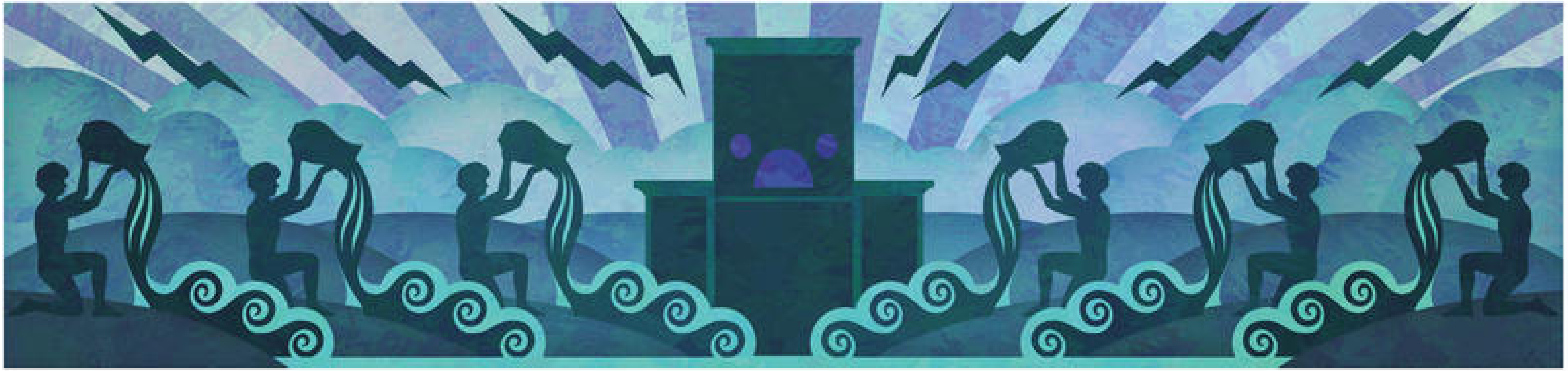


THE WATERWAYS

Although unfinished and abandoned, Denska's vast subterranean tunnels reveal much of the town's history and ambitions. You can still see many of the hydroelectric facility projects and upgrades as they were many years ago. In the upper levels, beautiful murals adorn the halls, portraying a Denska powered by clean and efficient energy.



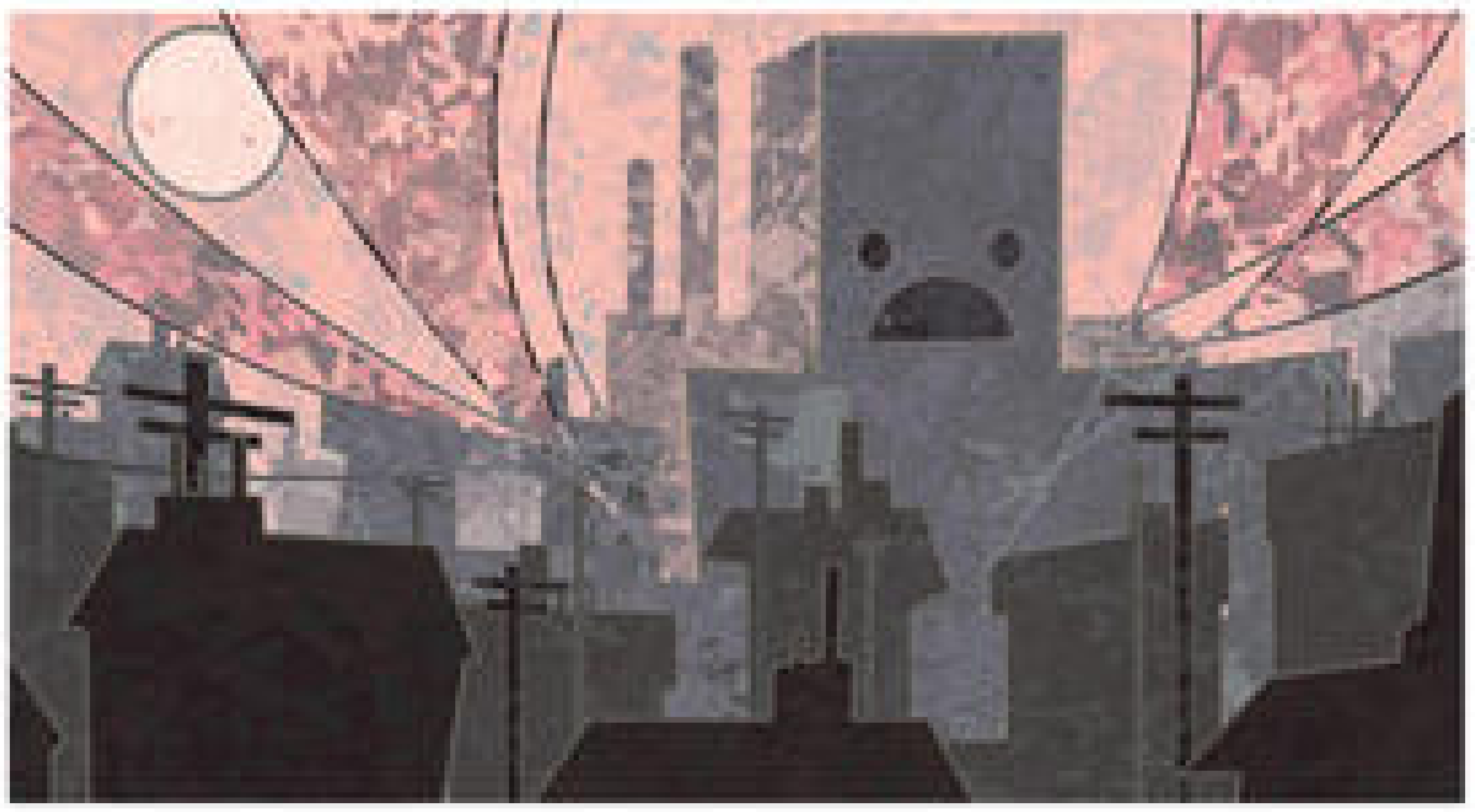
One of the first pieces done for the waterways, the goal was to design a variety of visual elements that would encapsulate the look of Denska's underworld.

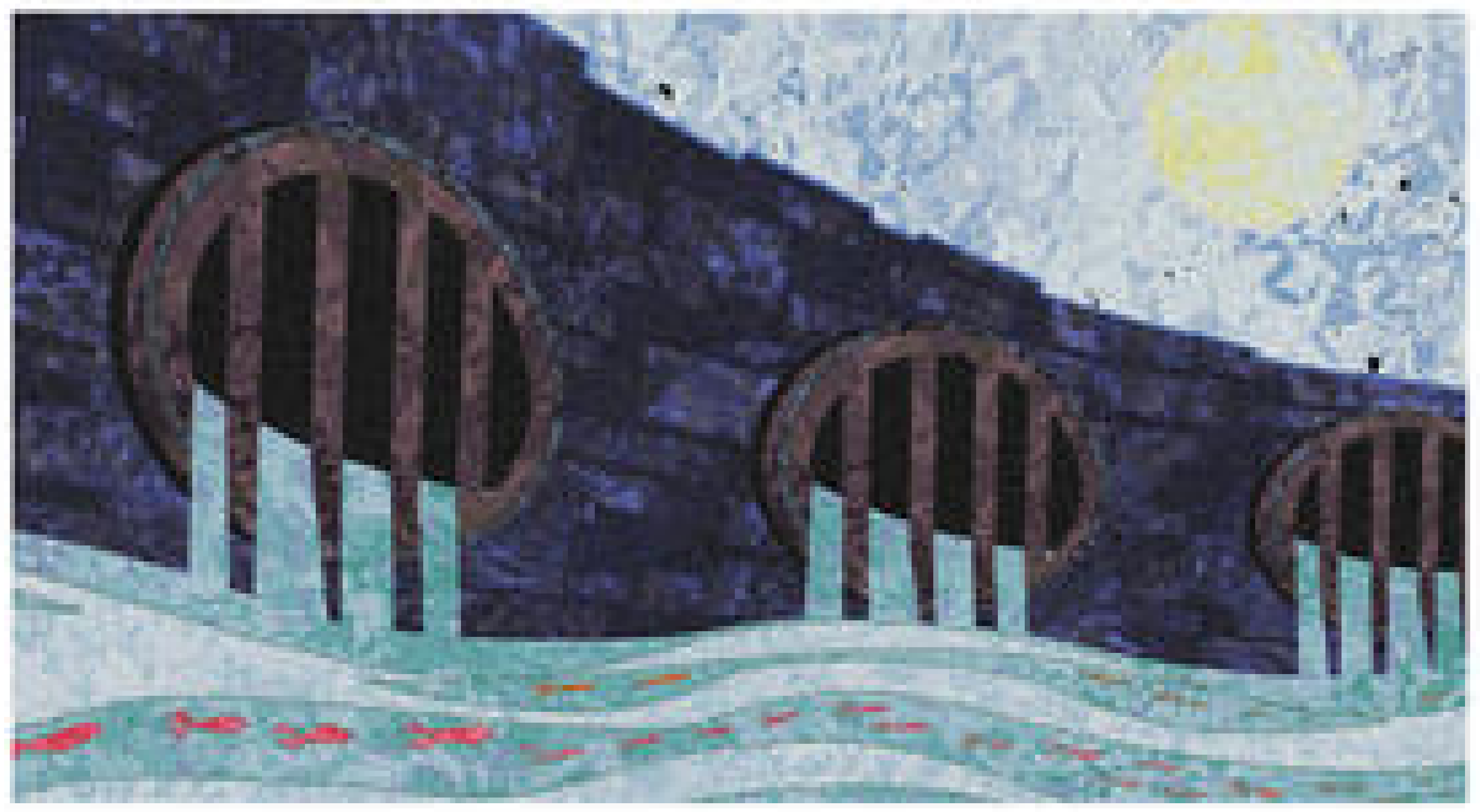


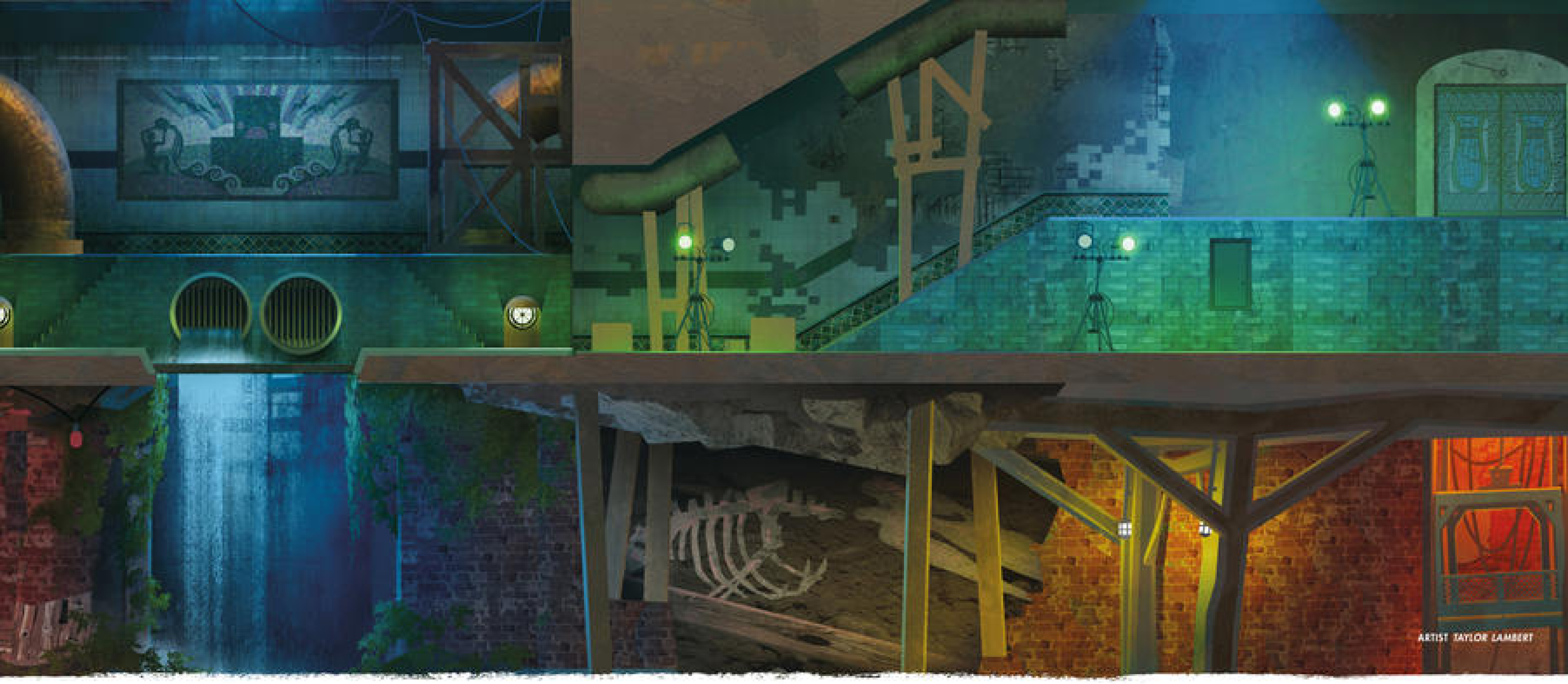
MOSAIC

Several mosaic murals line the halls of the waterways, revealing the hydroelectric facility's history and construction. Inspired by the industrial-age art-deco murals of the past, they provide visual clues to what Denska may have been.

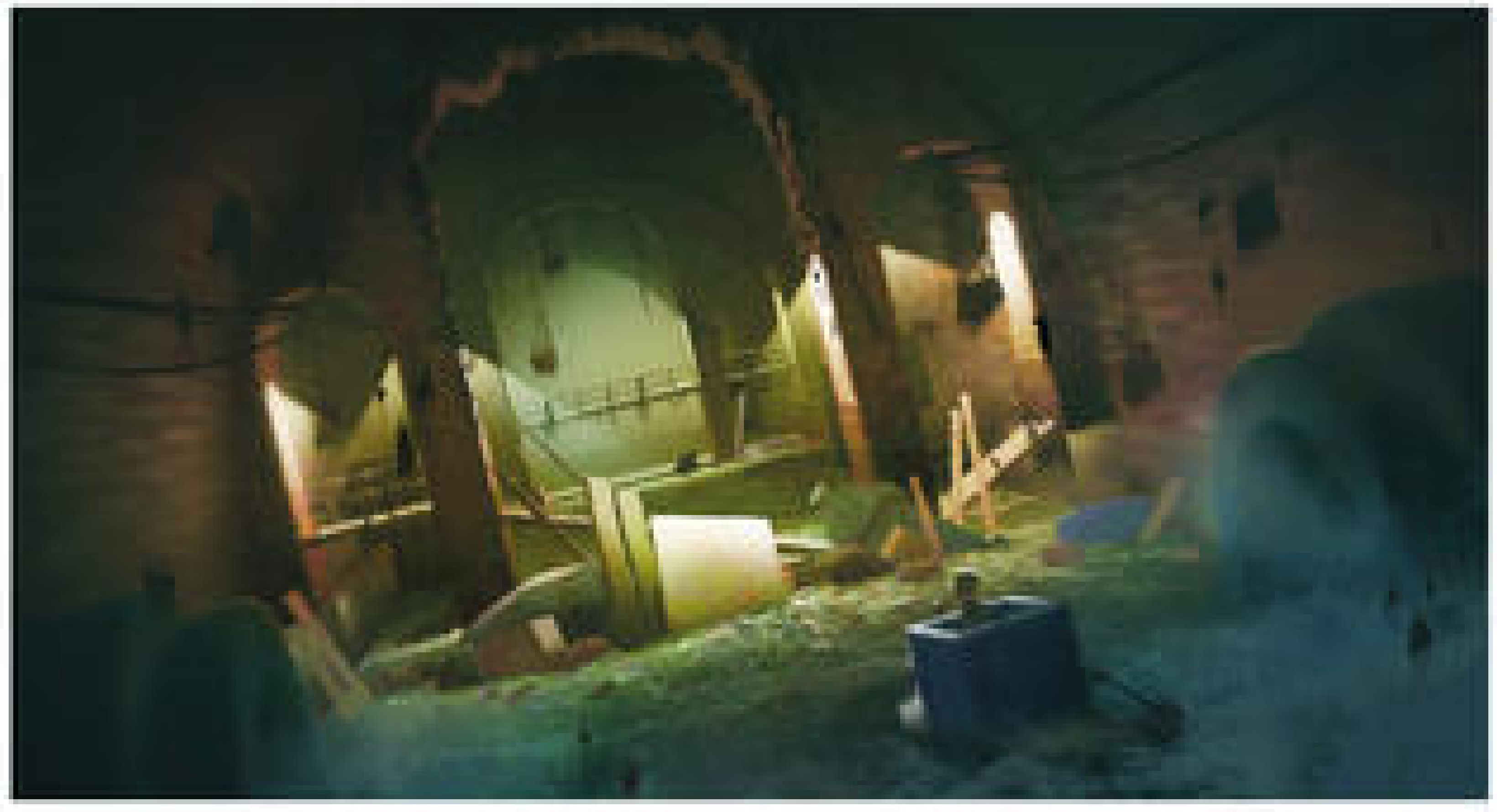
ARTIST JEFF SANGALLI

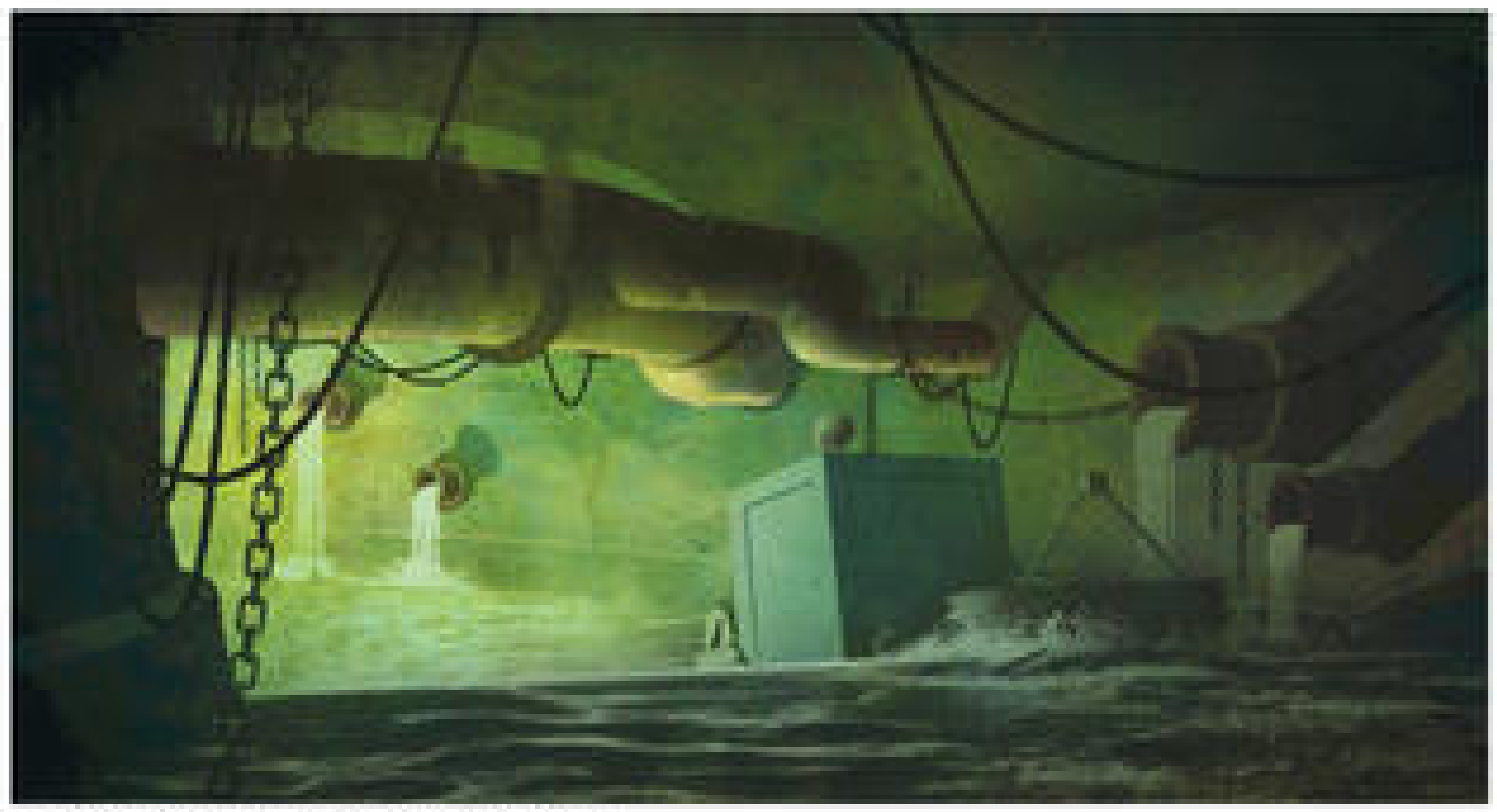




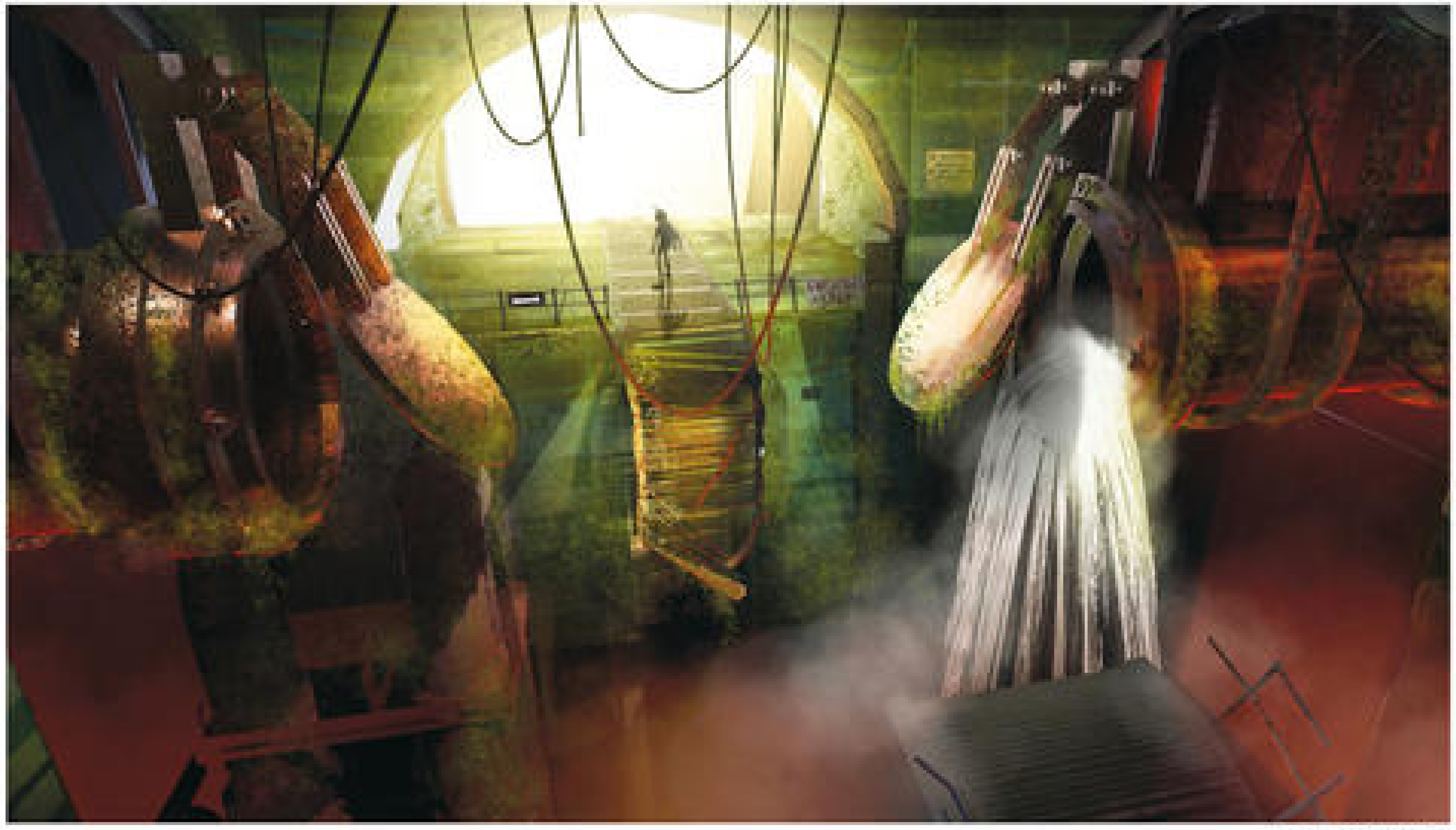


ARTIST TAYLOR LAMBERT



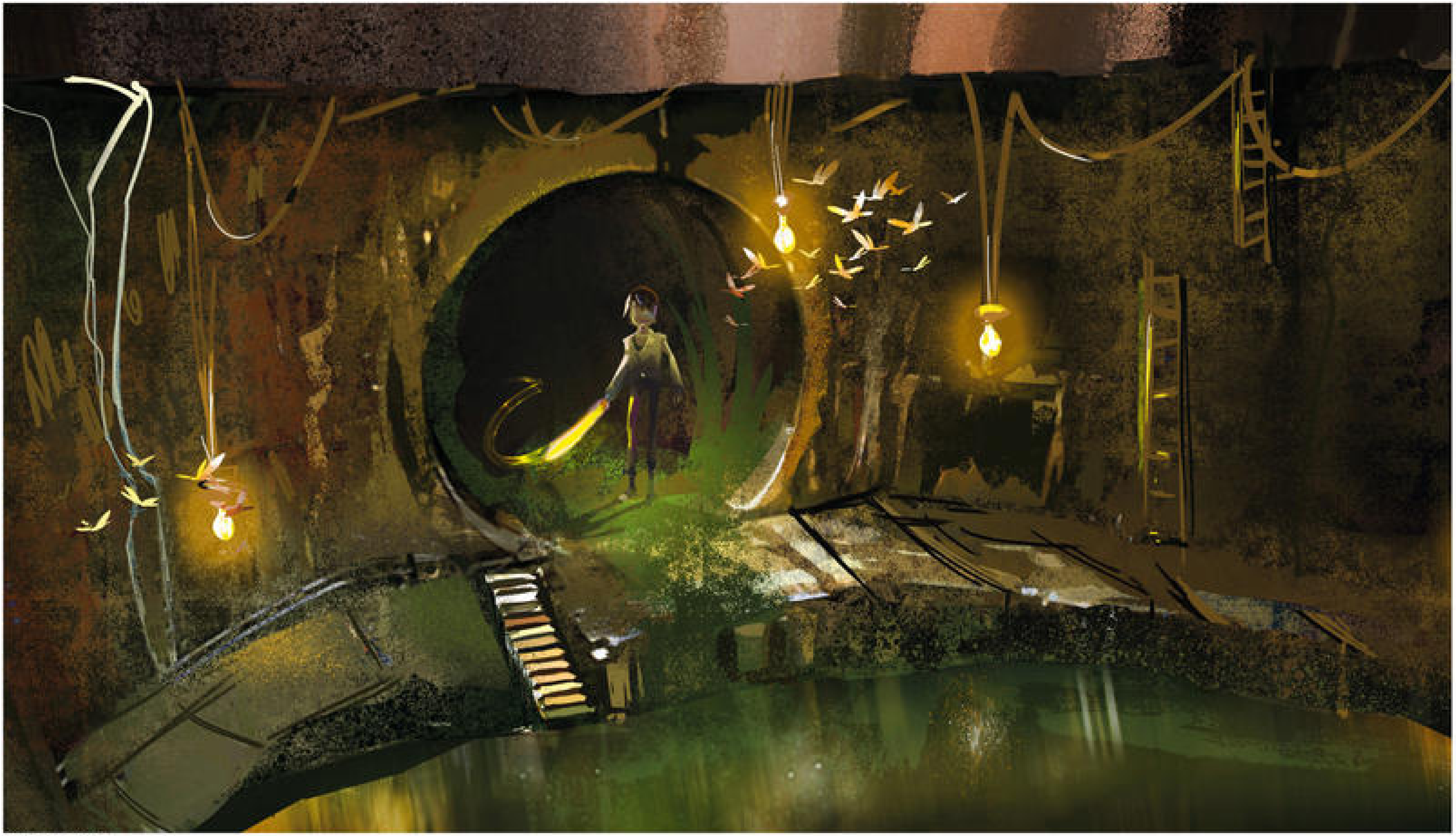


ARTIST TAYLOR LAMBERT (TOP AND BELLOW)

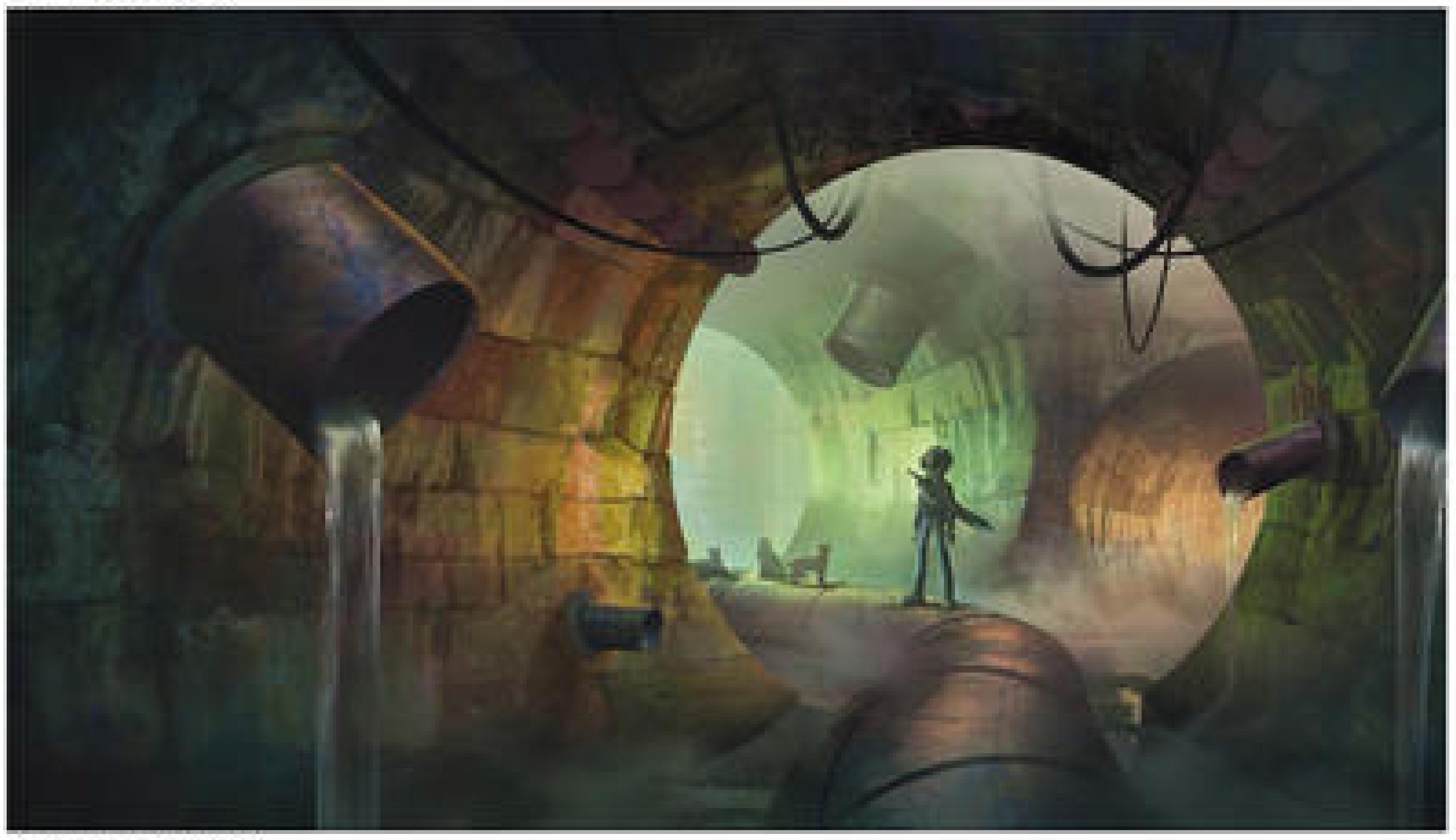


ARTIST JEFF SANGALLI

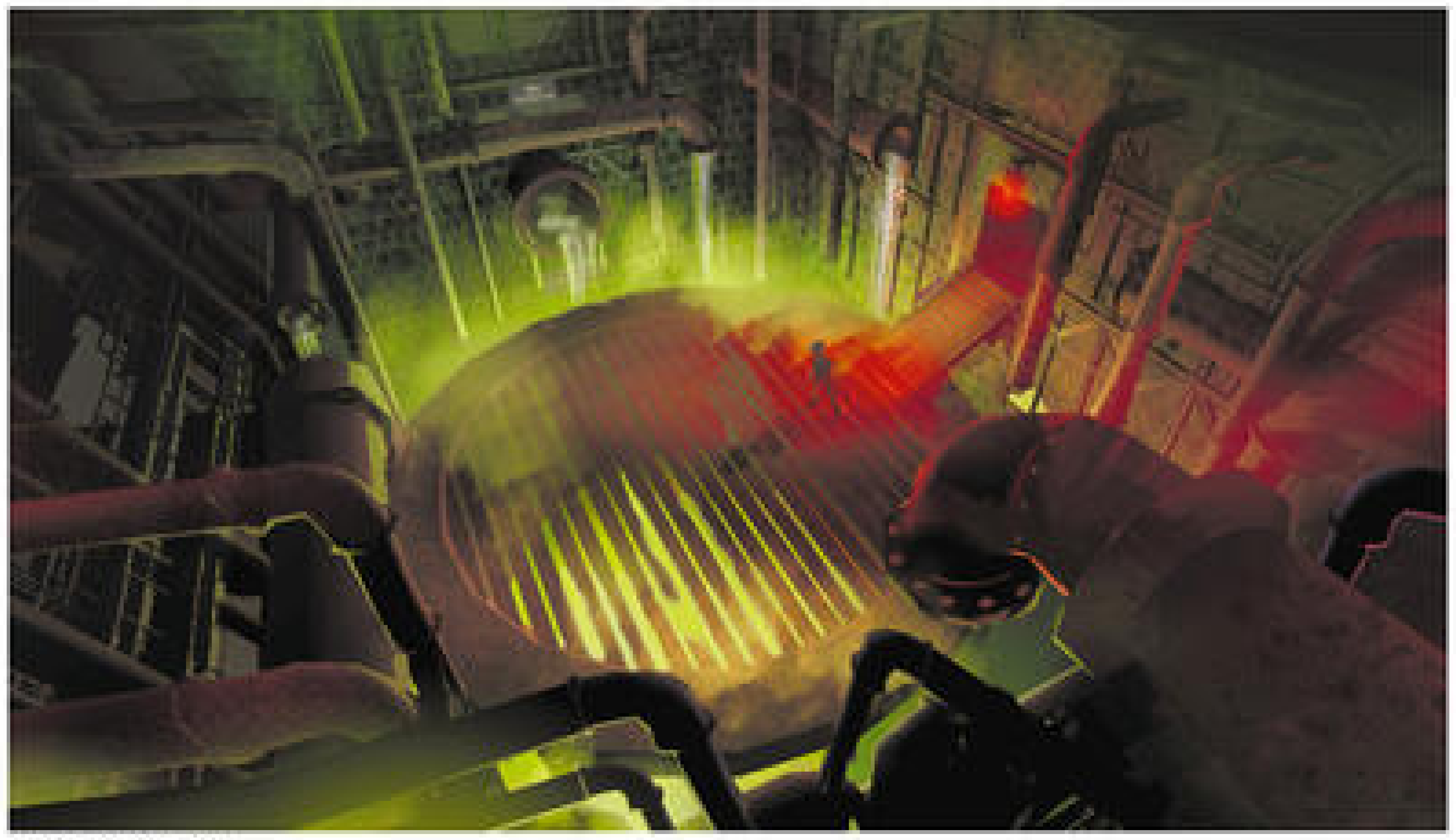
Massive steel valves, cathedral-like vaults, and twisting tunnel paths make the waterways one of the most gameplay-robust levels: while varied, colorful lighting makes it one of the most visually appealing environments.



ARTIST JEFF SANGALLI

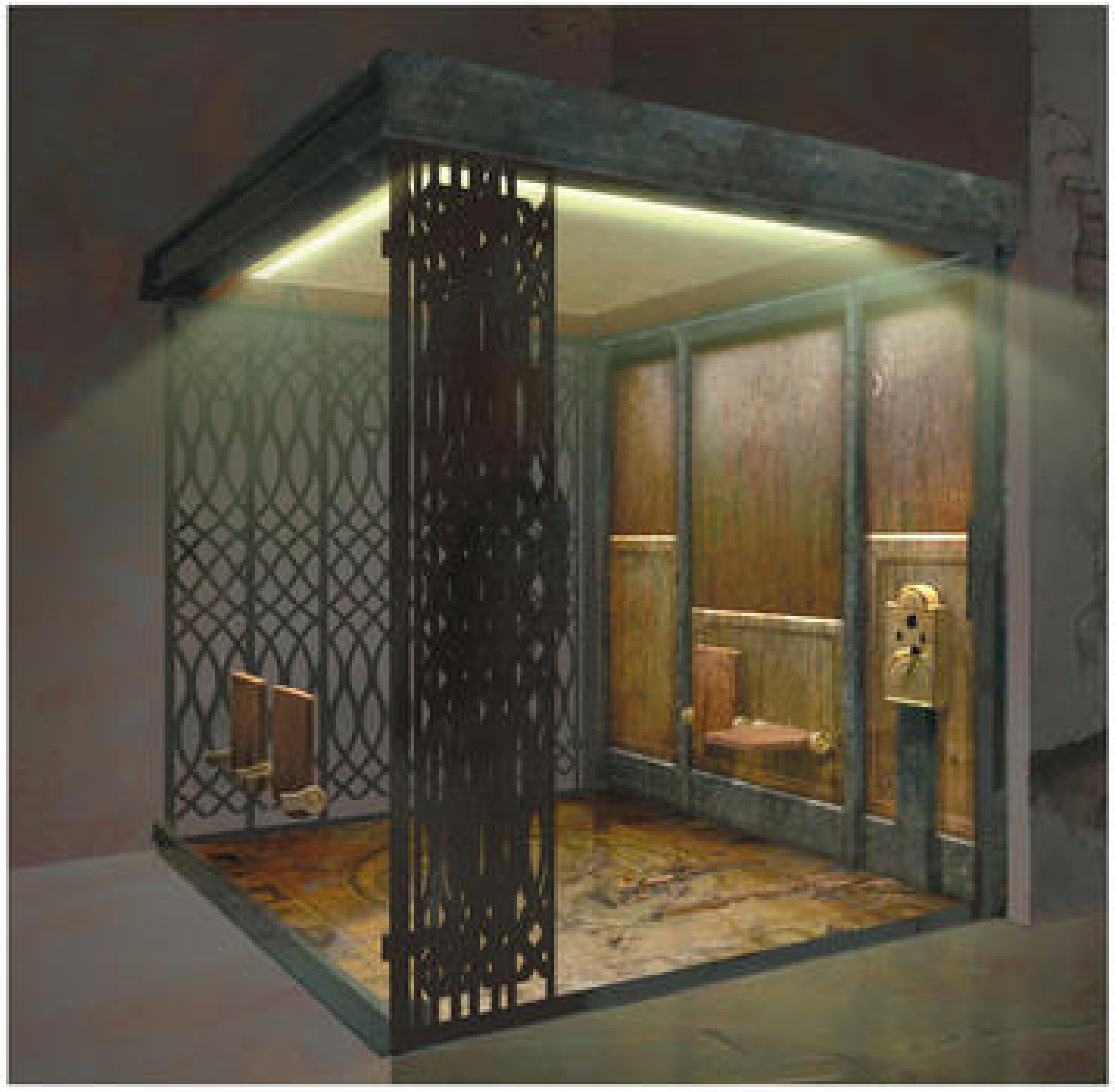


ARTIST TAYLOR LAMBERT



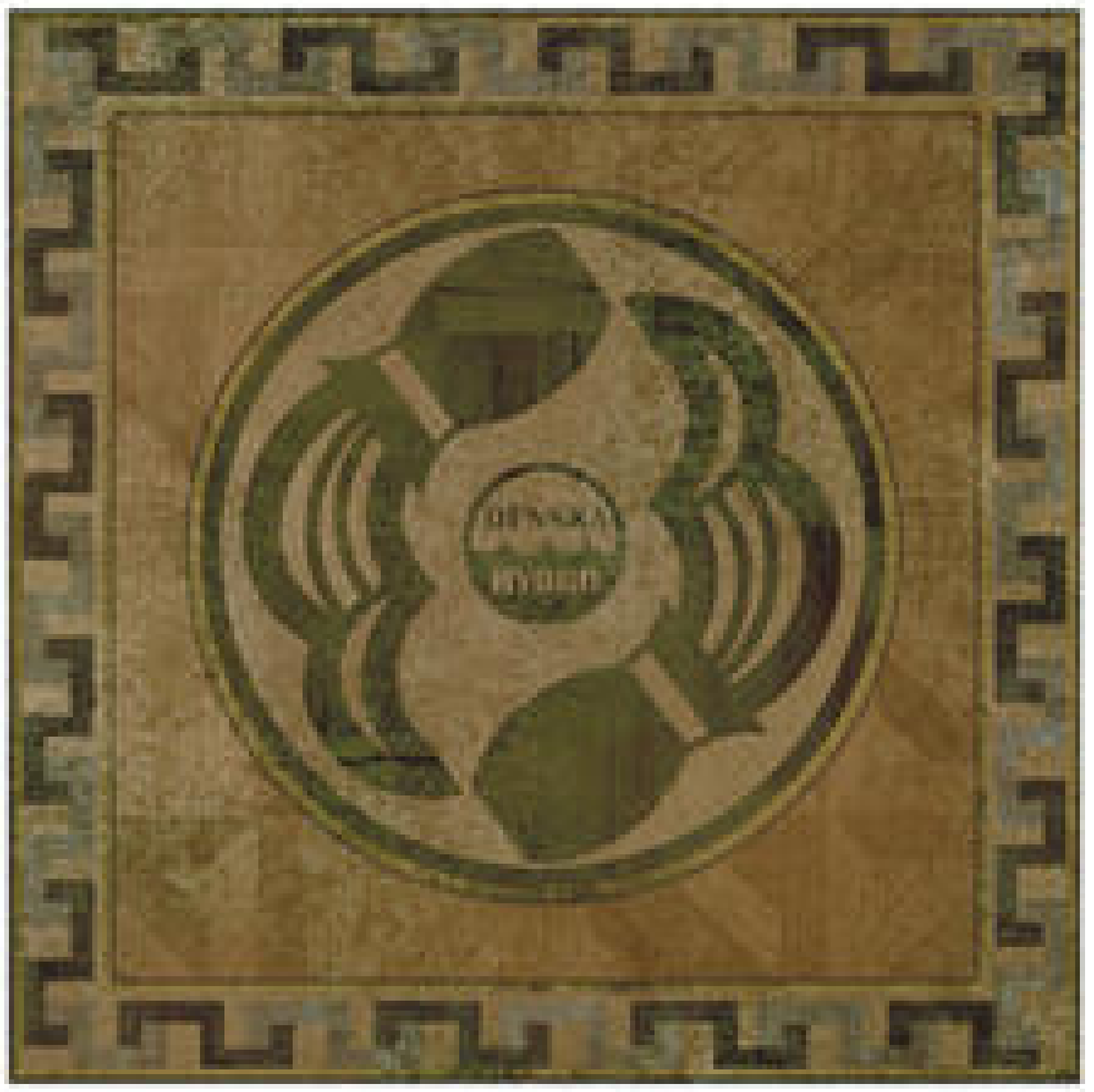
ARTIST JEFF SANGALLI

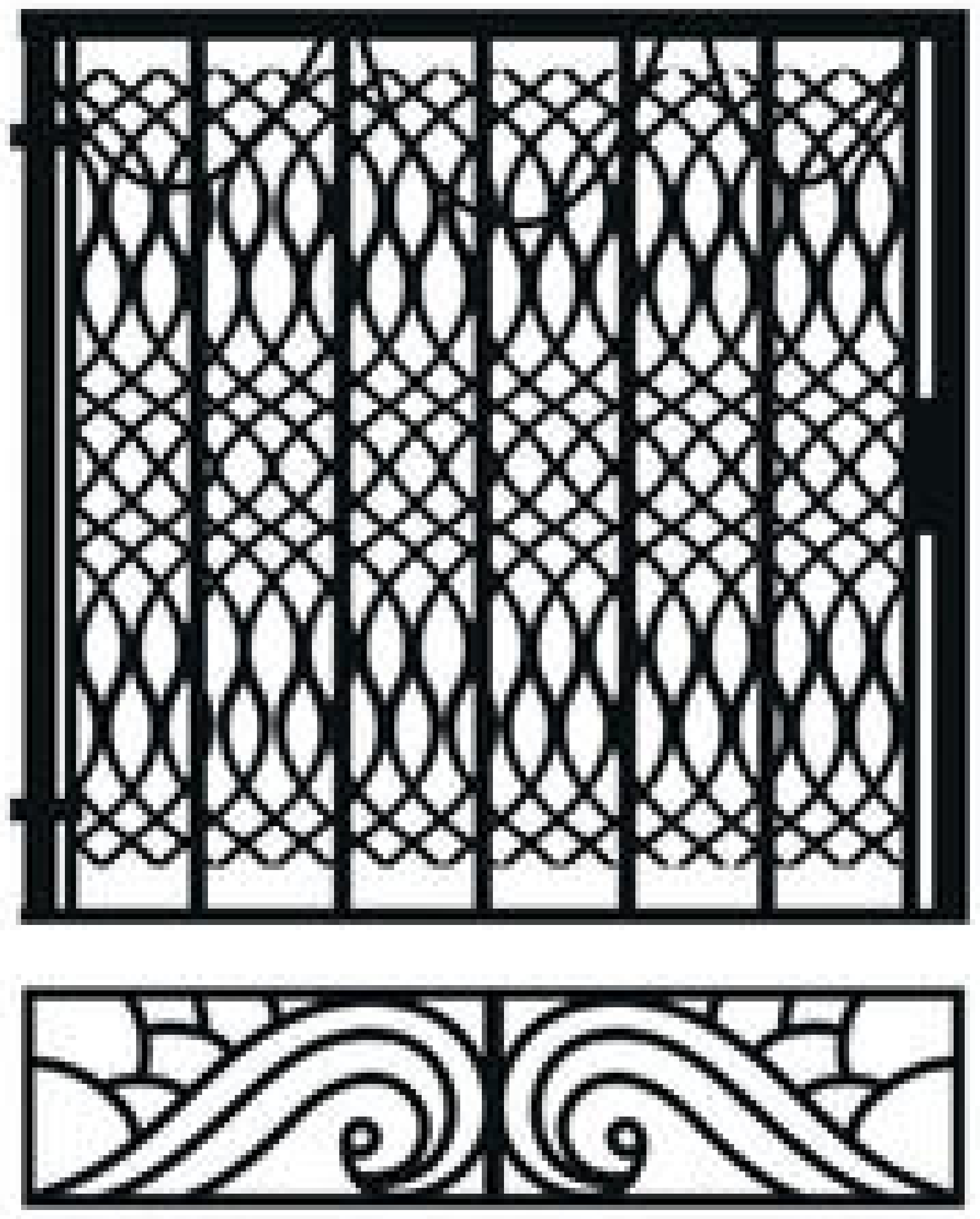
We really wanted to provide a range of contrasting environments within Denska, and going under the city made for the perfect opportunity.

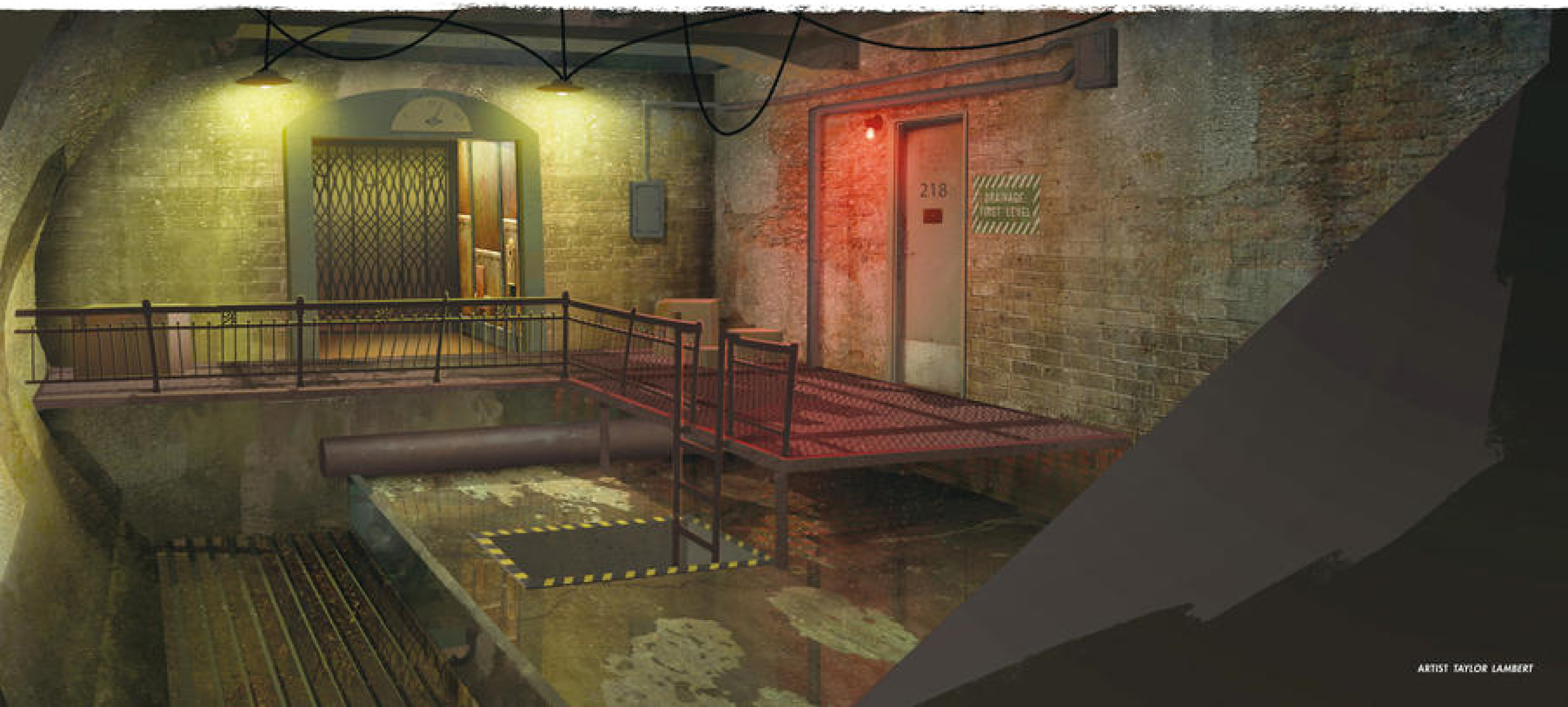


We often use practical set designs such as these to help inform how a level can be made to look authentic; they provide a visual guide that helps the whimsical feel believable.

ARTIST *TAYLOR LAMBERT*



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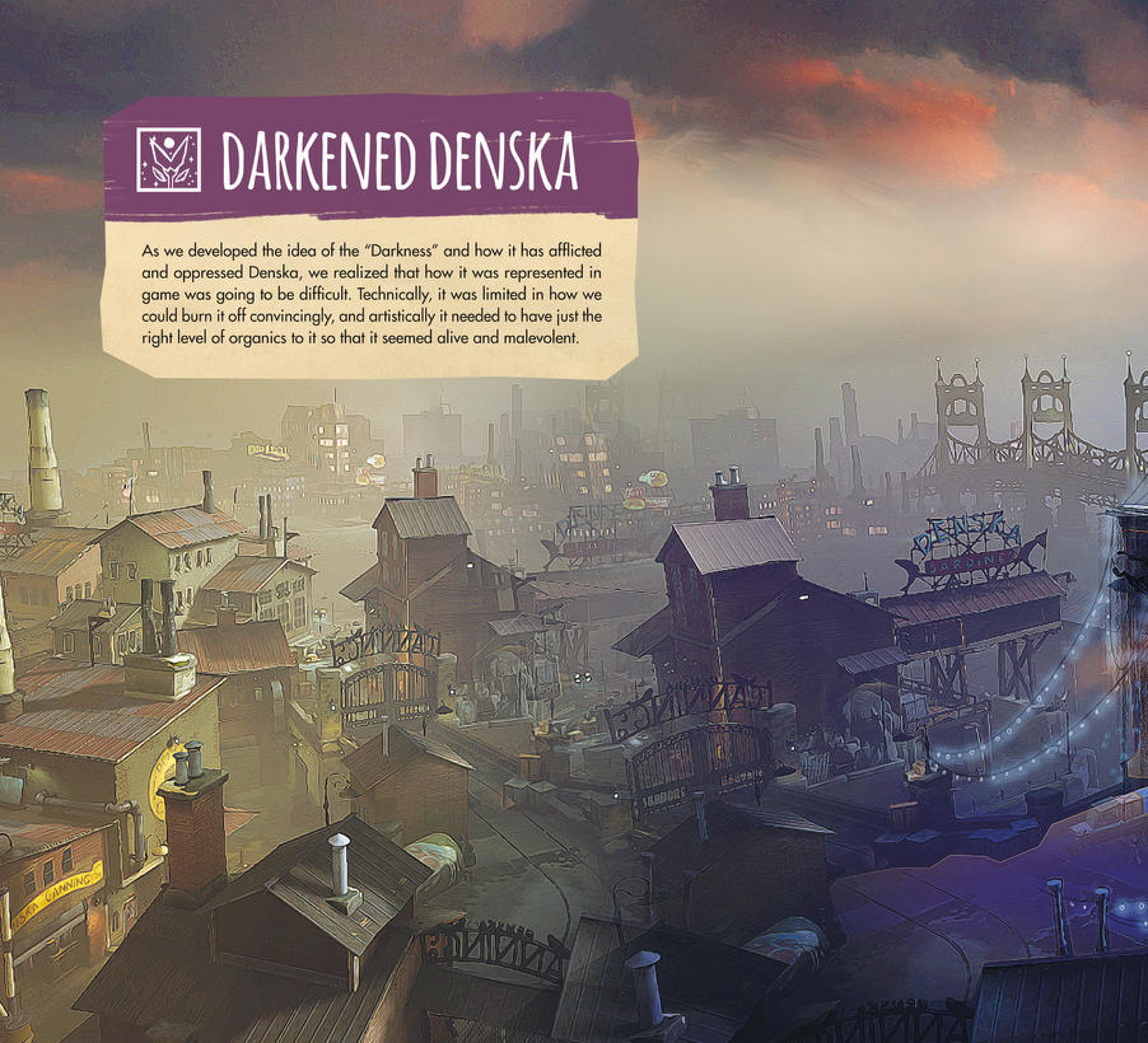
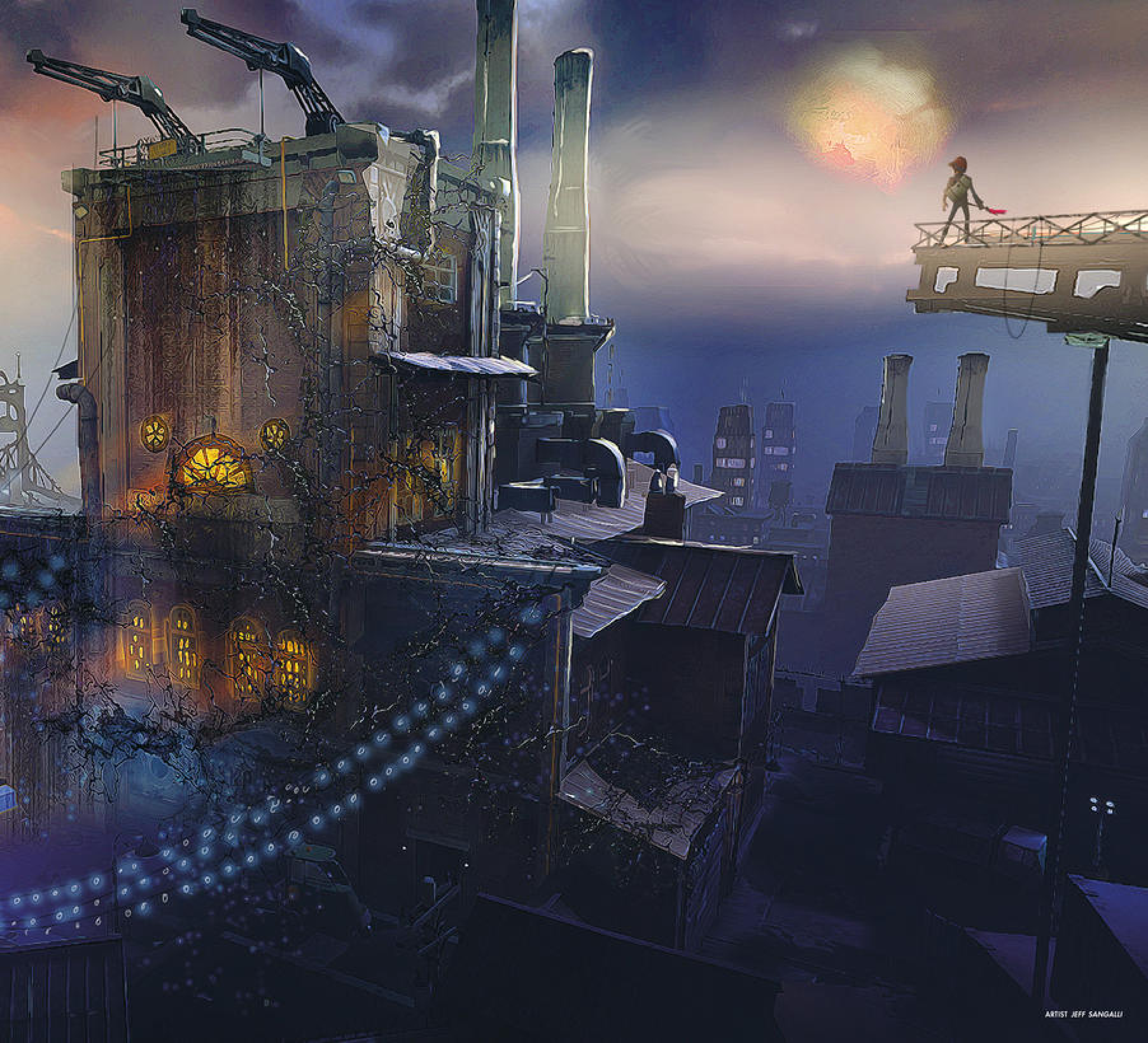
DRAINAGE
FIRST LEVEL

ARTIST *TAYLOR LAMBERT*

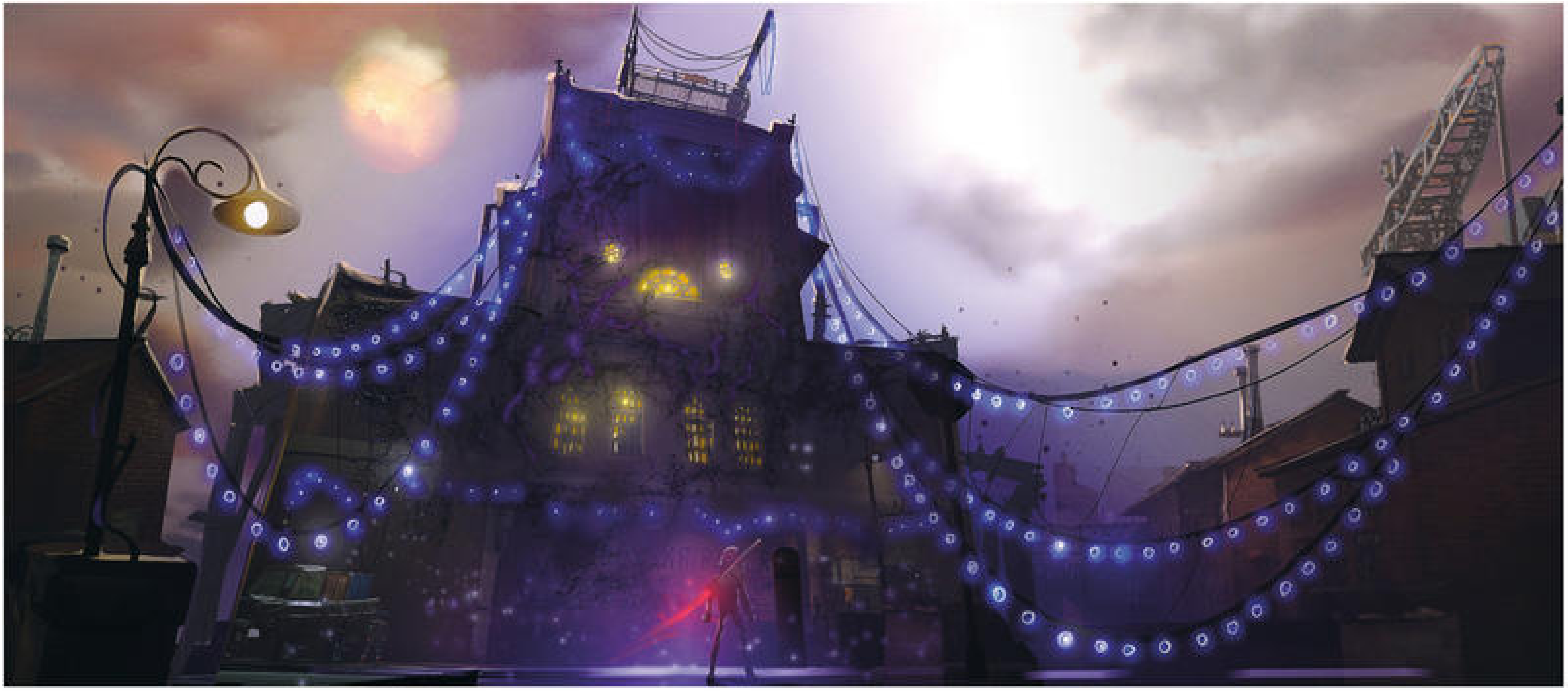
DARKENED DENSKA

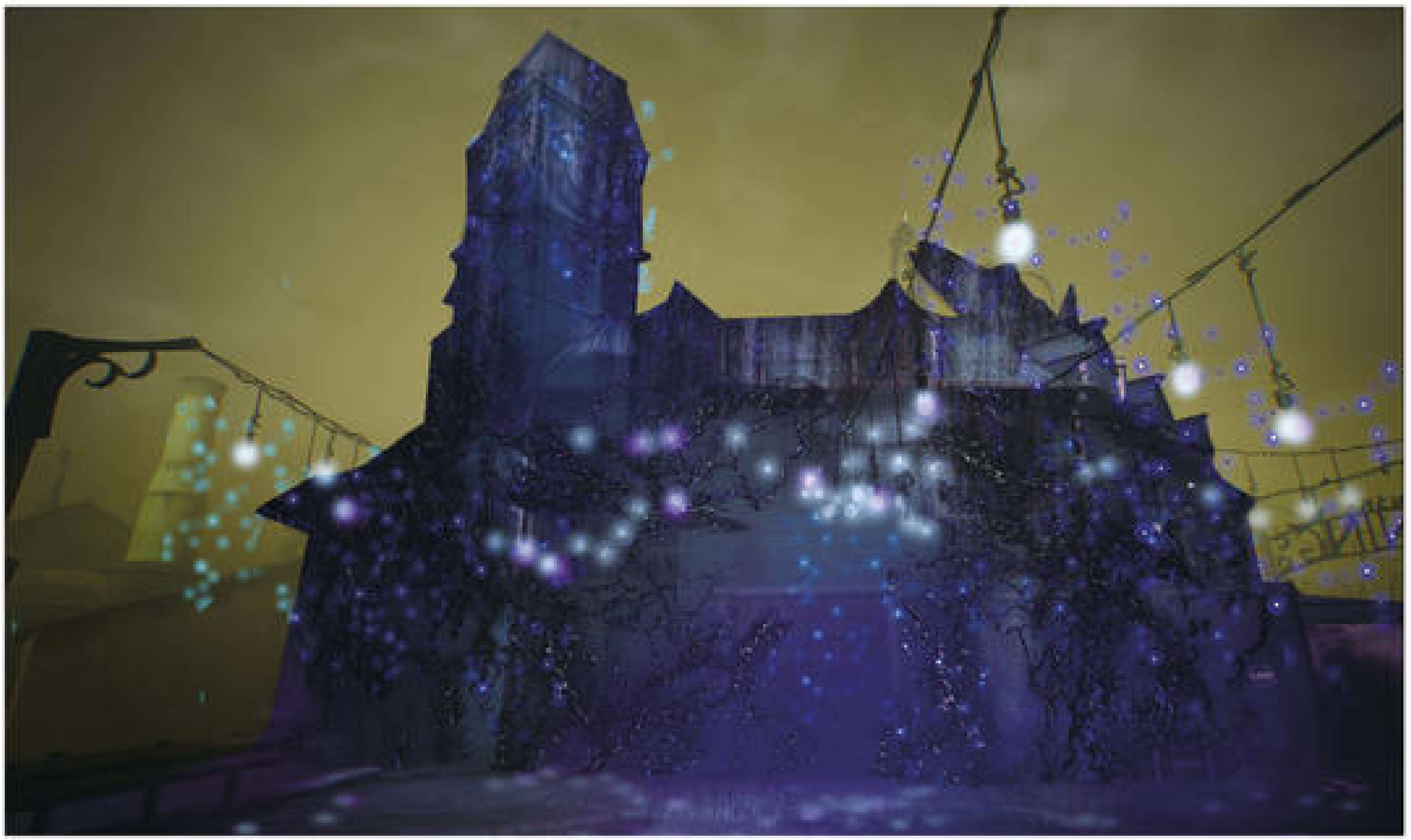
As we developed the idea of the "Darkness" and how it has afflicted and oppressed Denska, we realized that how it was represented in game was going to be difficult. Technically, it was limited in how we could burn it off convincingly, and artistically it needed to have just the right level of organics to it so that it seemed alive and malevolent.

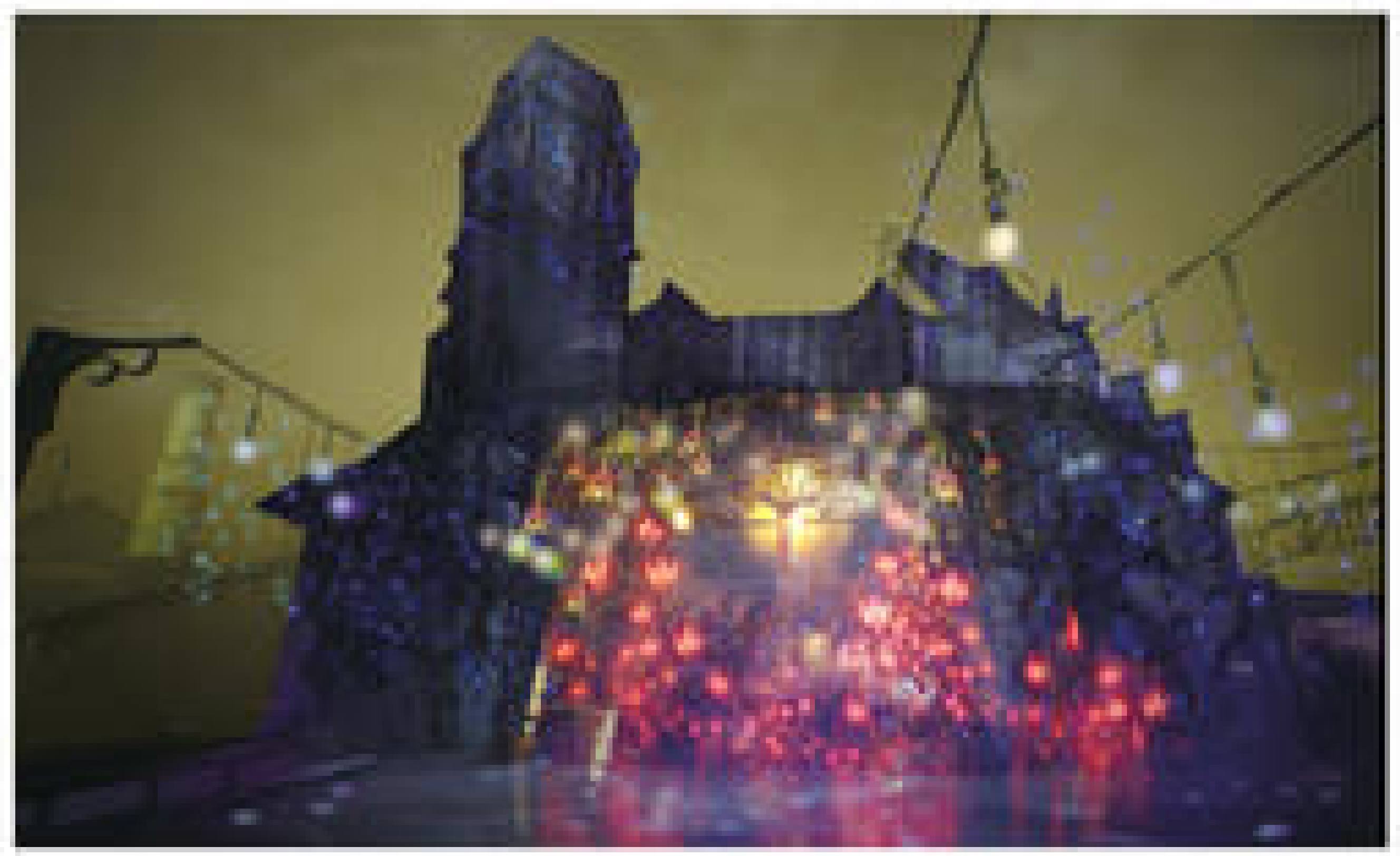


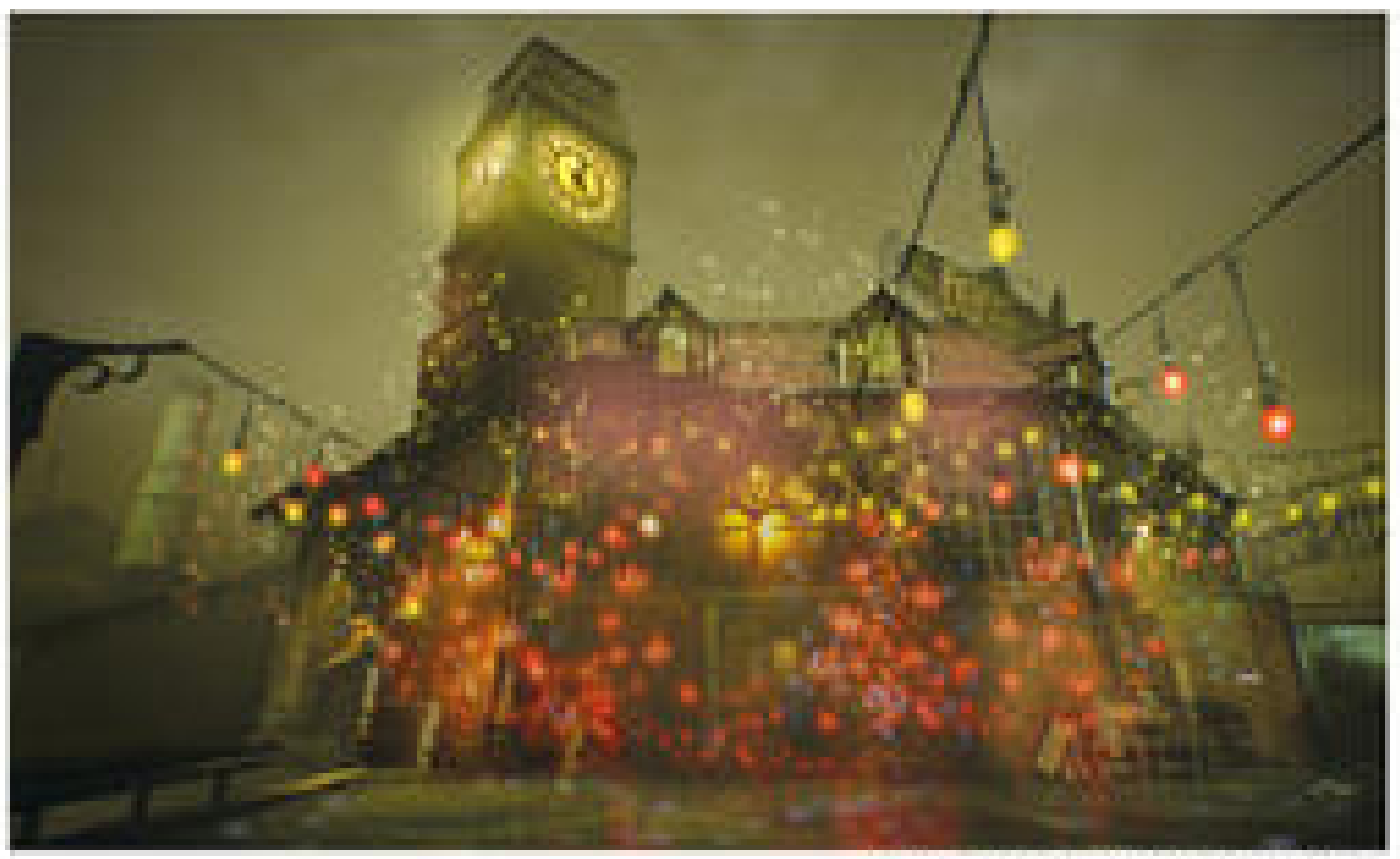


ARTIST JEFF SANGALLI



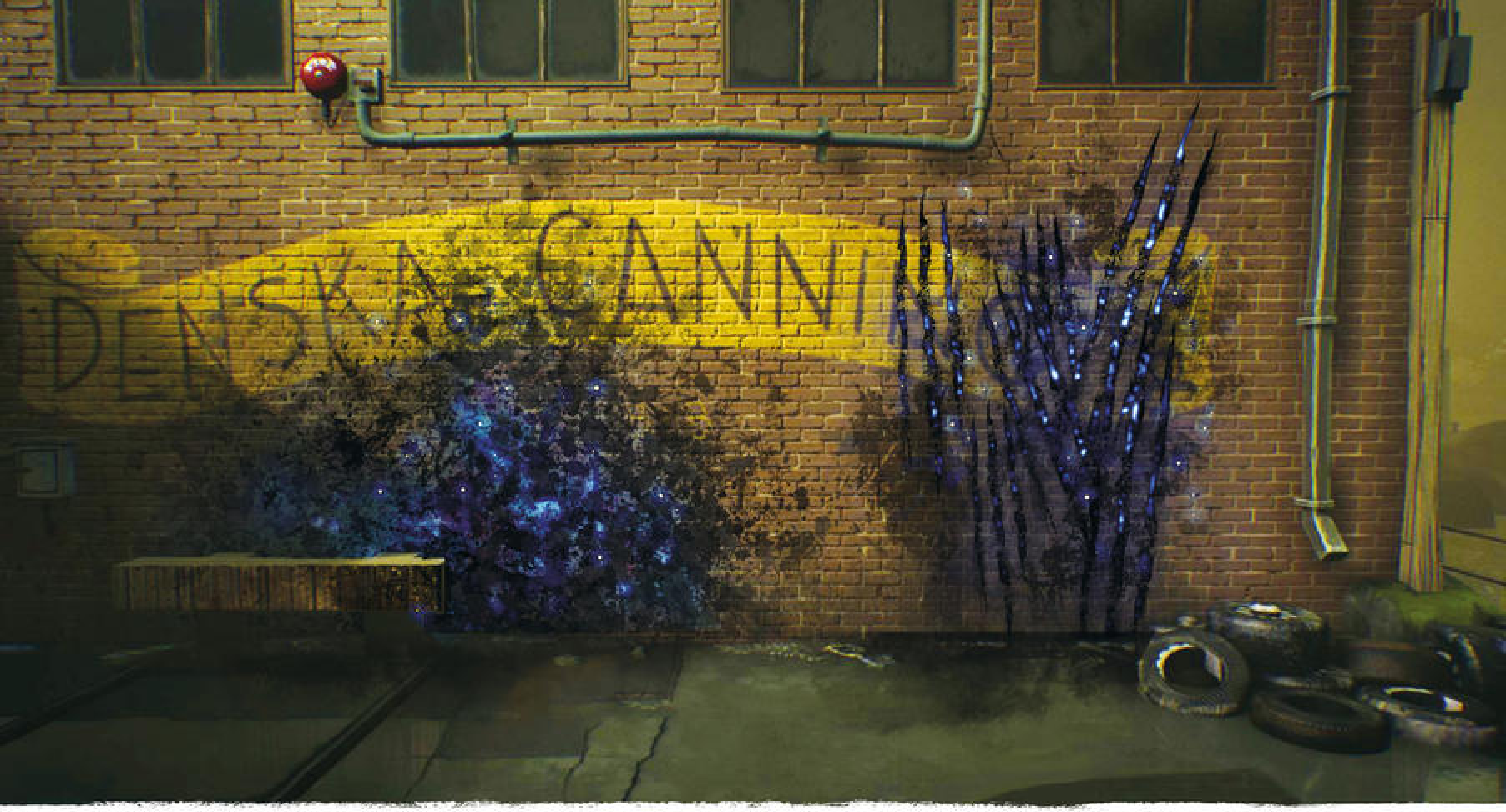


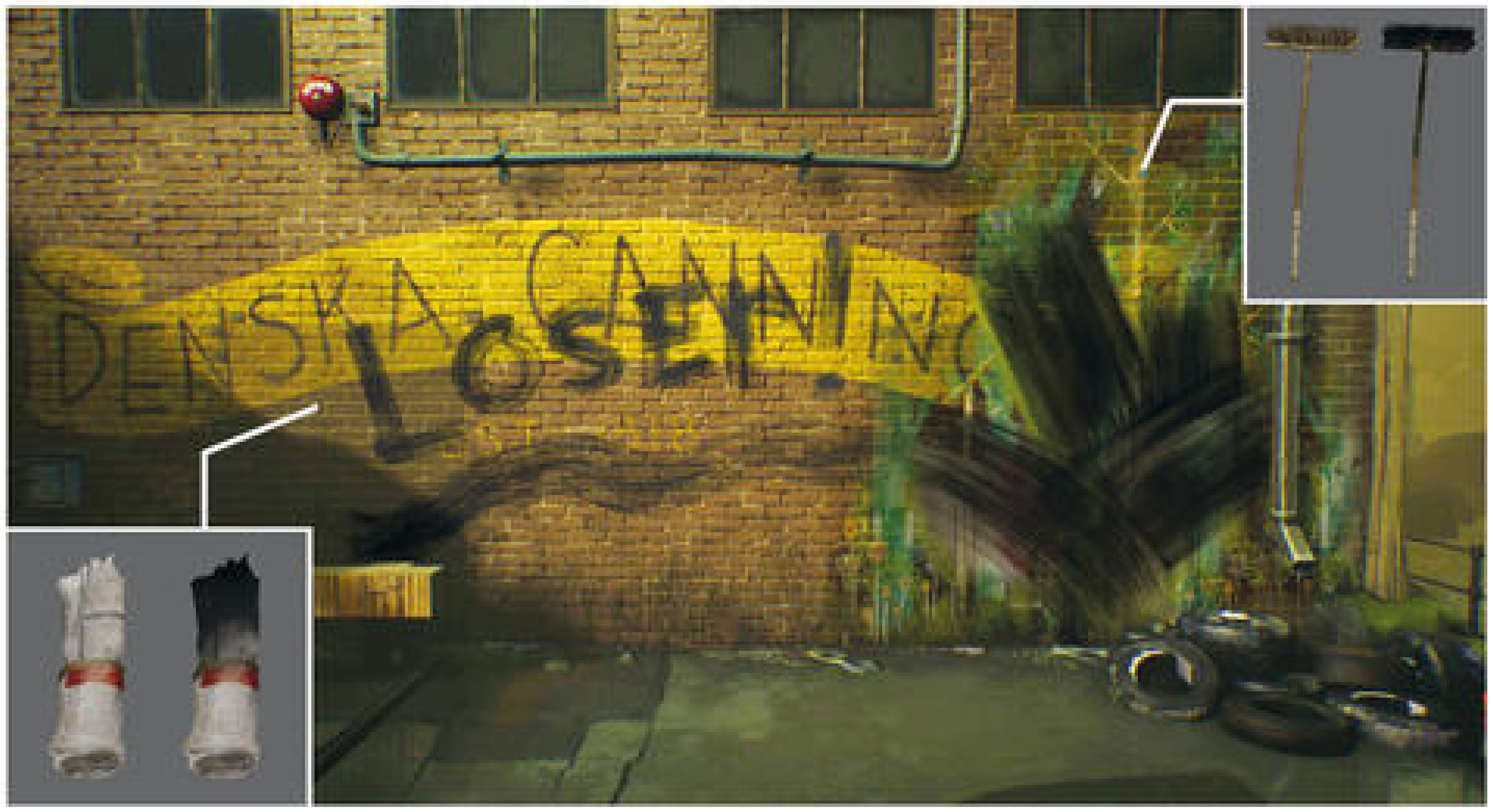


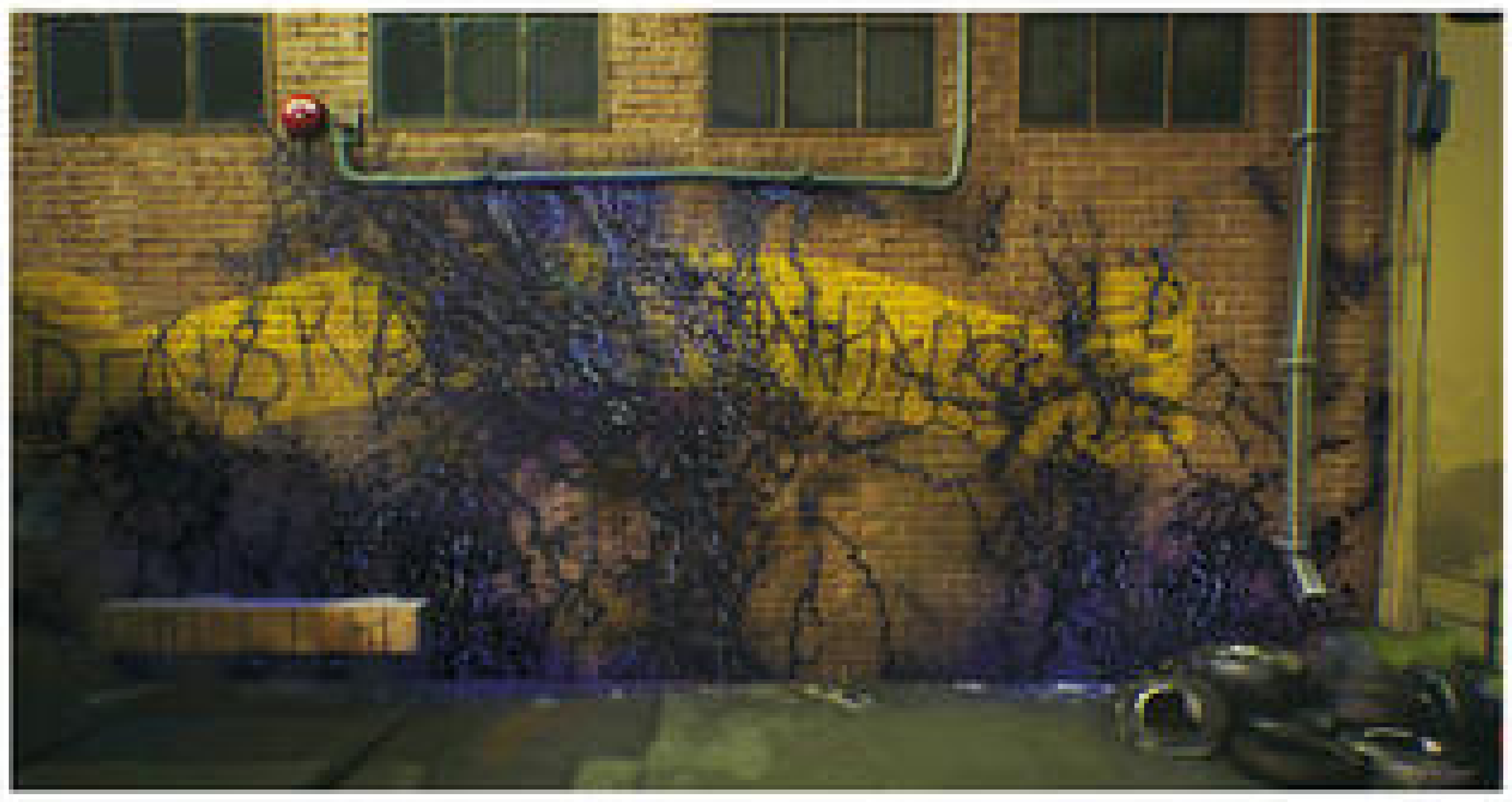


ARTIST JEFF SANGALLI (THIS PAGE)

These pieces beautifully describe the transition we wanted to happen when the player completed each masterpiece at the end of a level. It's a showcase moment of how the player's artwork can really bring the life back to these key locations.

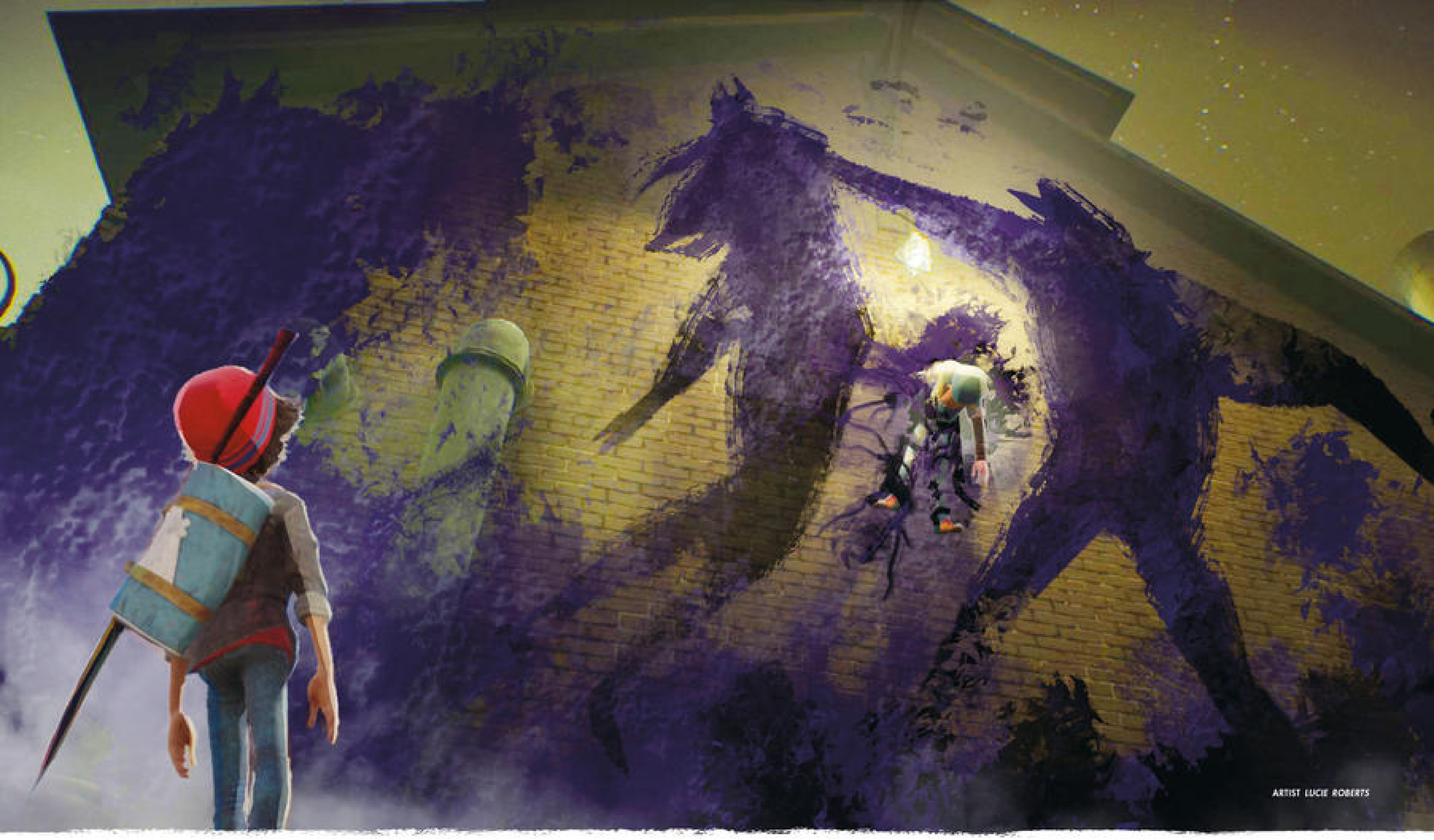

DENSKA CANNIN


DENSKA CANNING
LOSER



We knew the Darkness was going to be an integral part of our game, and designing different ways that it could show up in our town was a crucial part of developing our gameplay.

ARTIST *TAYLOR LAMBERT (THIS PAGE)*

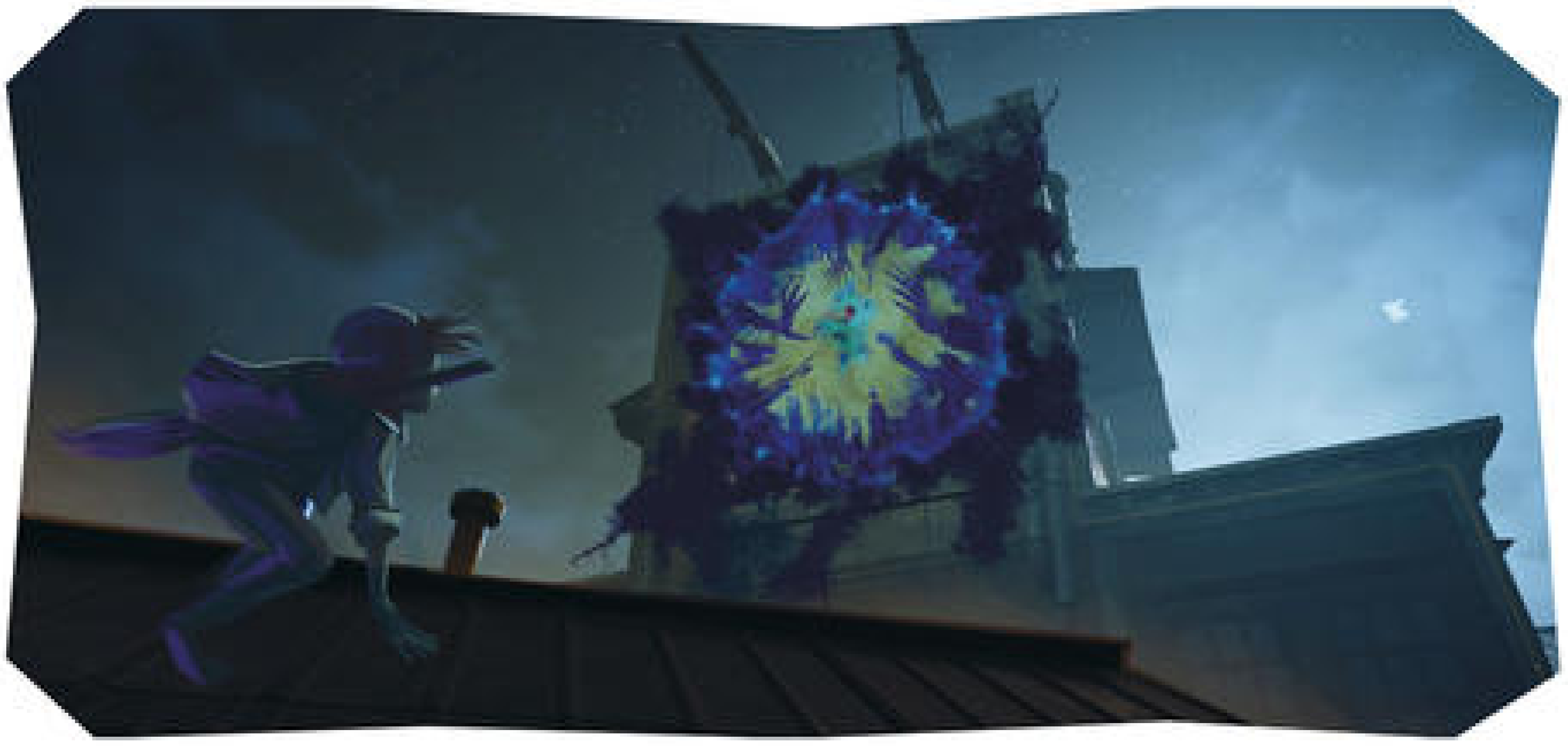


ARTIST LUCIE ROBERTS

AGONY

These "agony" paintings were an idea that our script writer, Evan Skolnick, helped develop. They were a pivotal part of the twist in the third act, and were designed to viscerally demonstrate the idea that these painful memories or nightmares of the bullies were literally trapping them, keeping them held in pain. Their designs pick up on silhouettes and shape language taken directly from the flashbacks seen earlier in the game.

ARTIST BECKY ROBERTS (RIGHT)



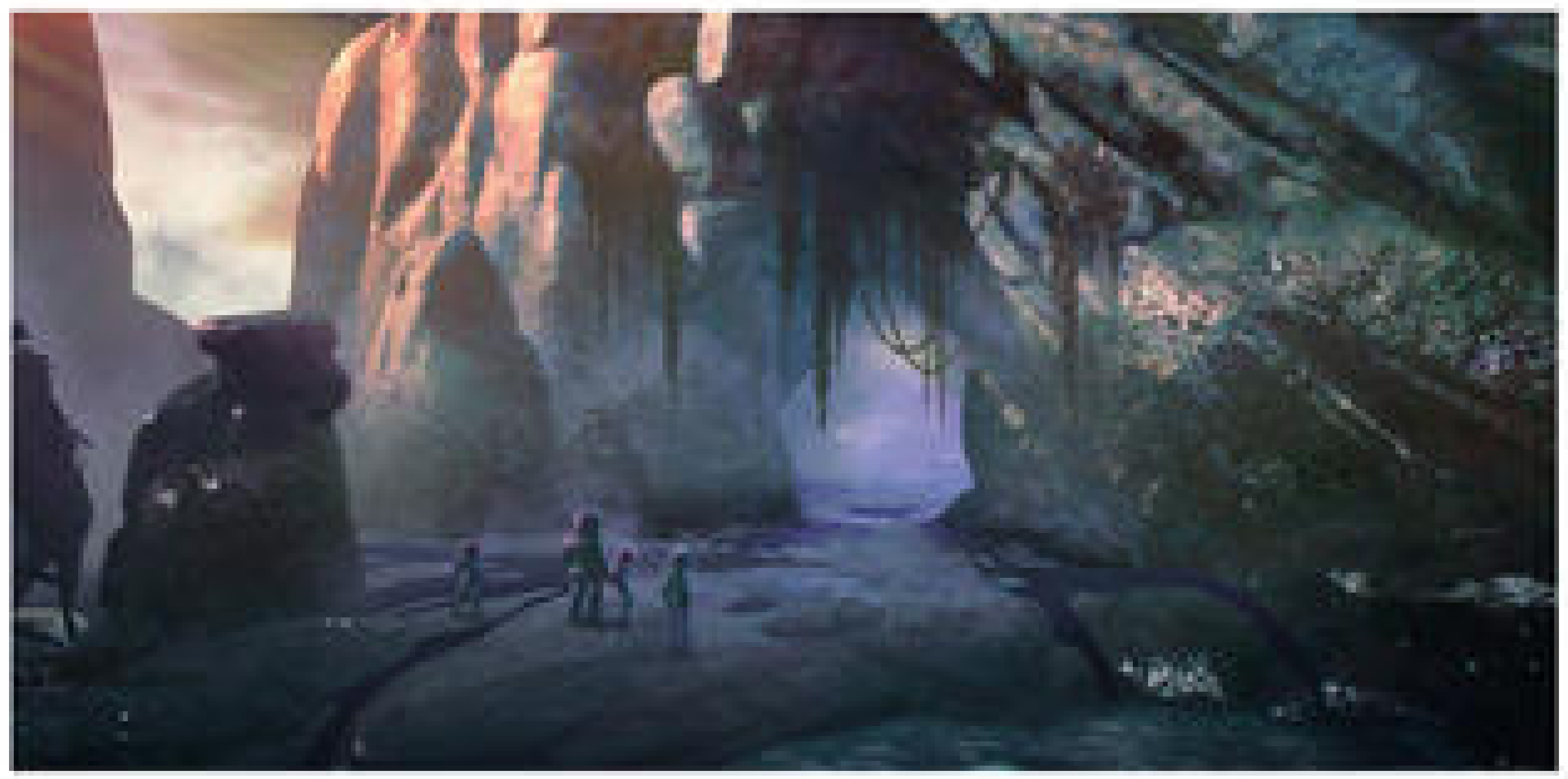
ARTIST TAYLOR LAMBERT (THIS PAGE)

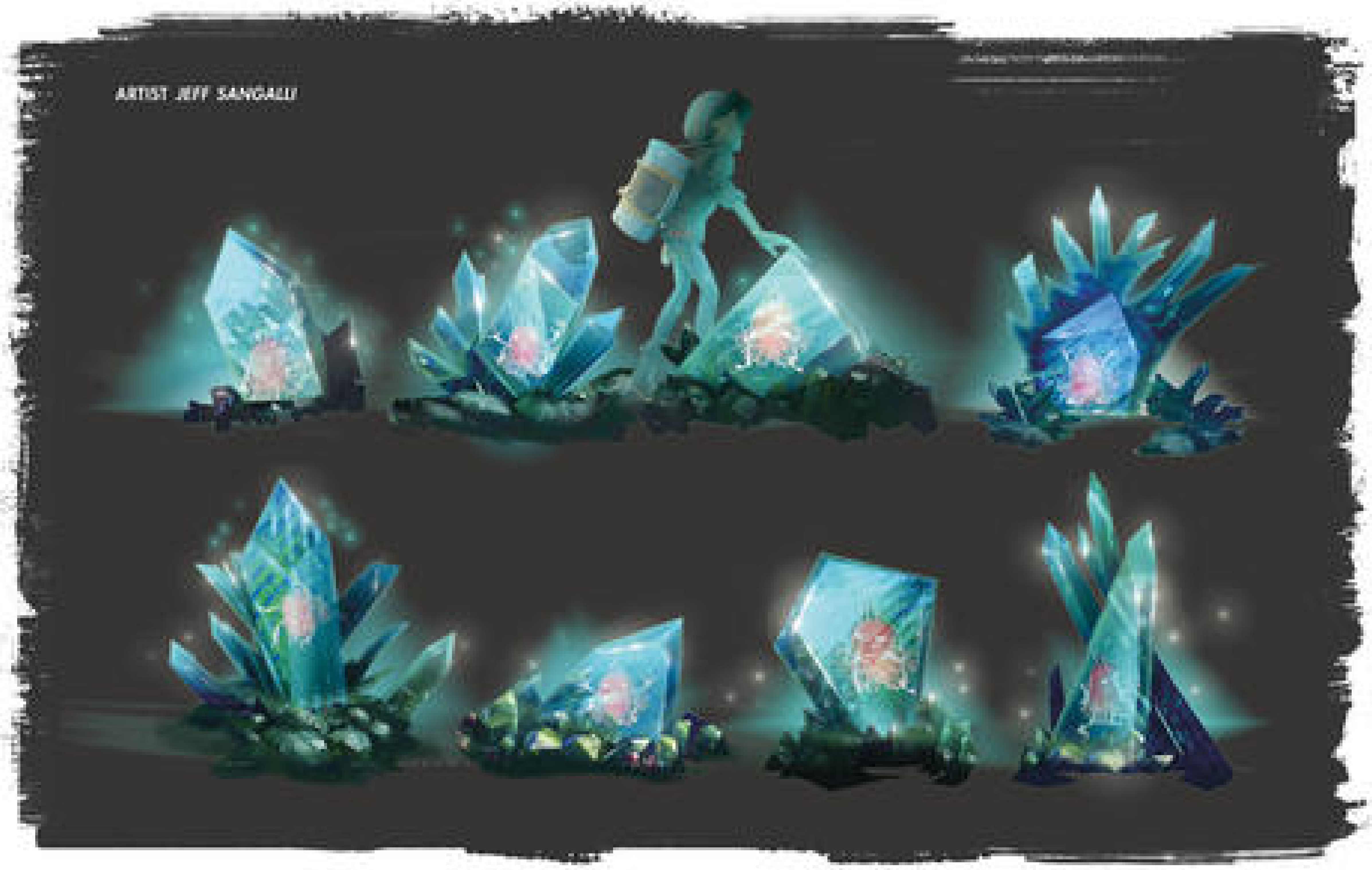
After the Bullies are captured by the dark creatures, they are trapped here, in the physical manifestations of their tragic childhoods, frozen in specific moments from our flashback sequences.

CRYSTAL CAVE

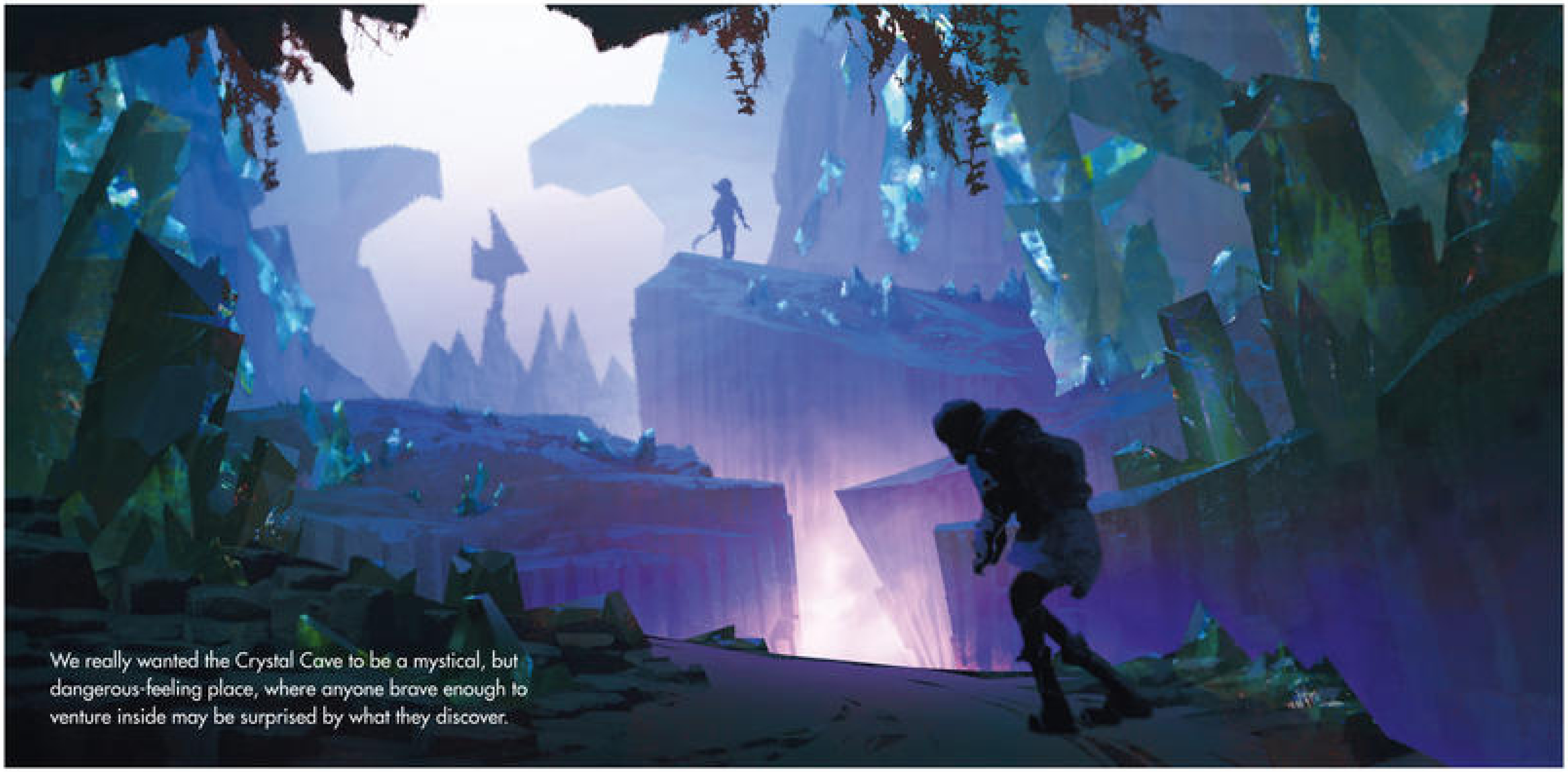
The Crystal Cave was another opportunity to bring in yet another environment type, and one that could showcase some of the ancient magical properties that the lighthouse island possesses. The gameplay in this section is really meant to show the kids starting to come together, and so environmental hazards and scare moments were incorporated to give the kids things to react to as they are cautiously moving through the environment.

ARTIST TAYLOR LAMBERT (BELLOW)

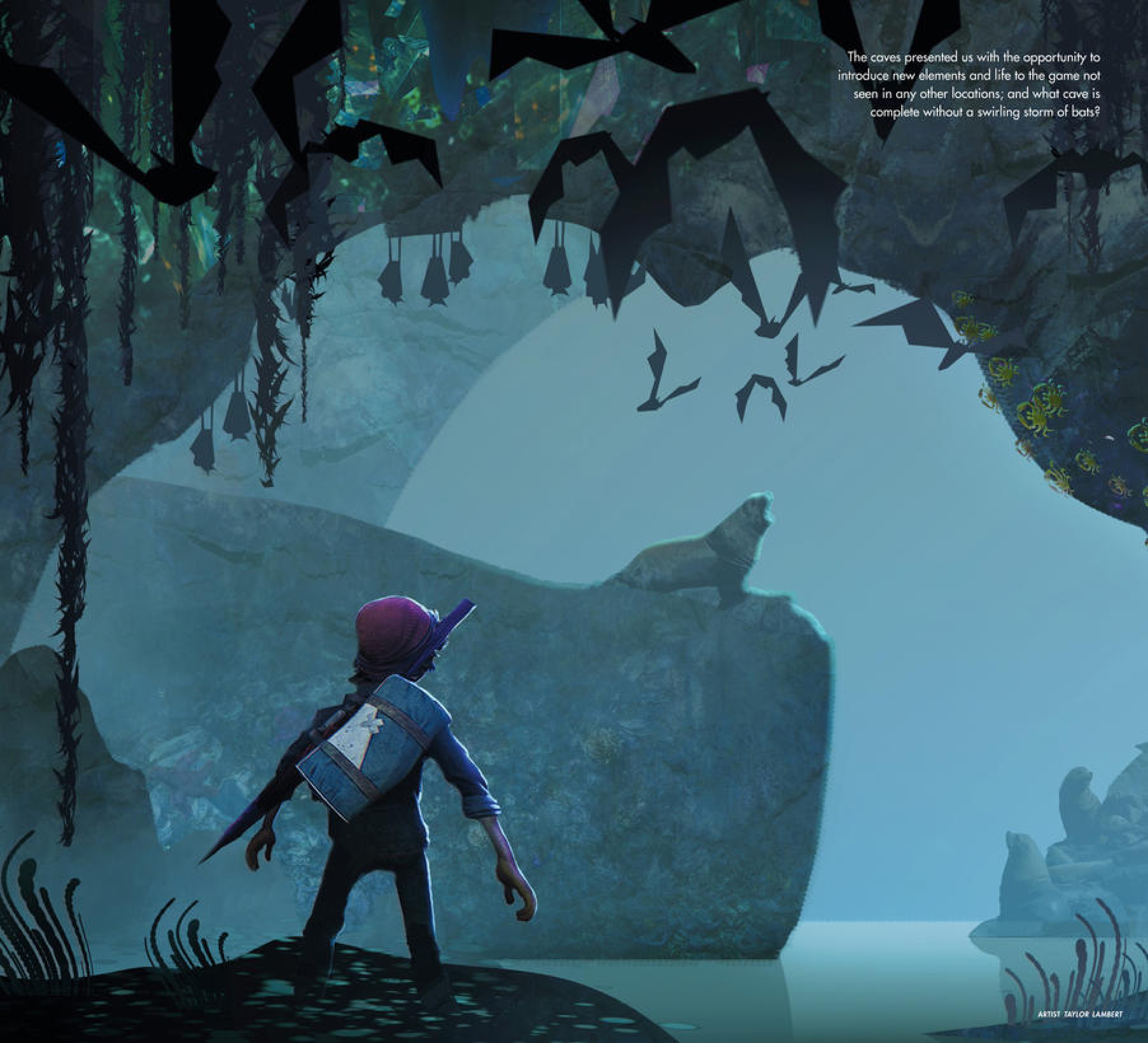




ARTIST JEFF SANGALLI

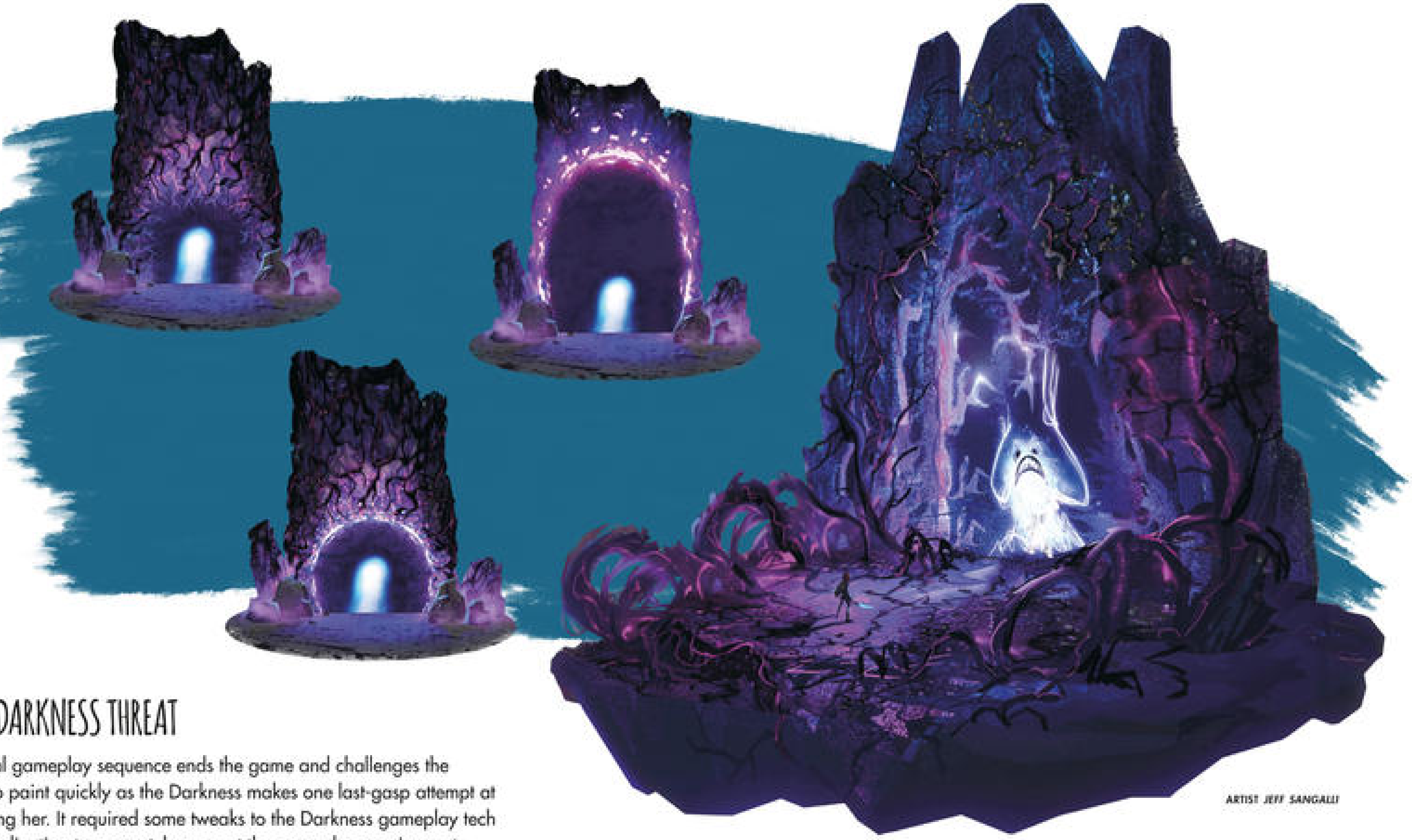


We really wanted the Crystal Cave to be a mystical, but dangerous-feeling place, where anyone brave enough to venture inside may be surprised by what they discover.



The caves presented us with the opportunity to introduce new elements and life to the game not seen in any other locations; and what cave is complete without a swirling storm of bats?

ARTIST *TAYLOR LAMBERT*

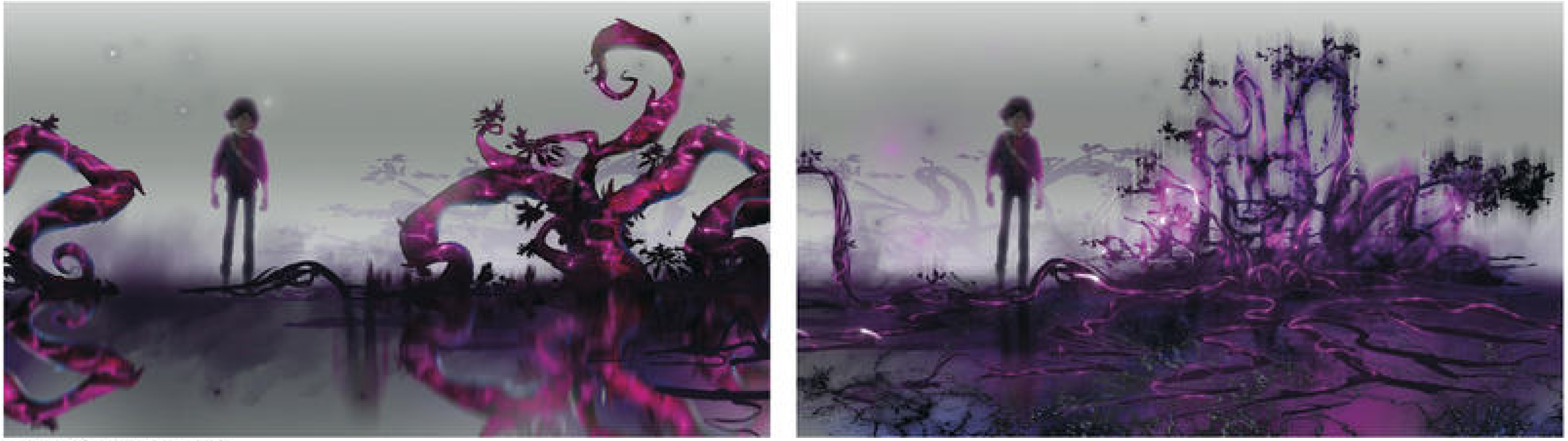


ARTIST JEFF SANGALLI

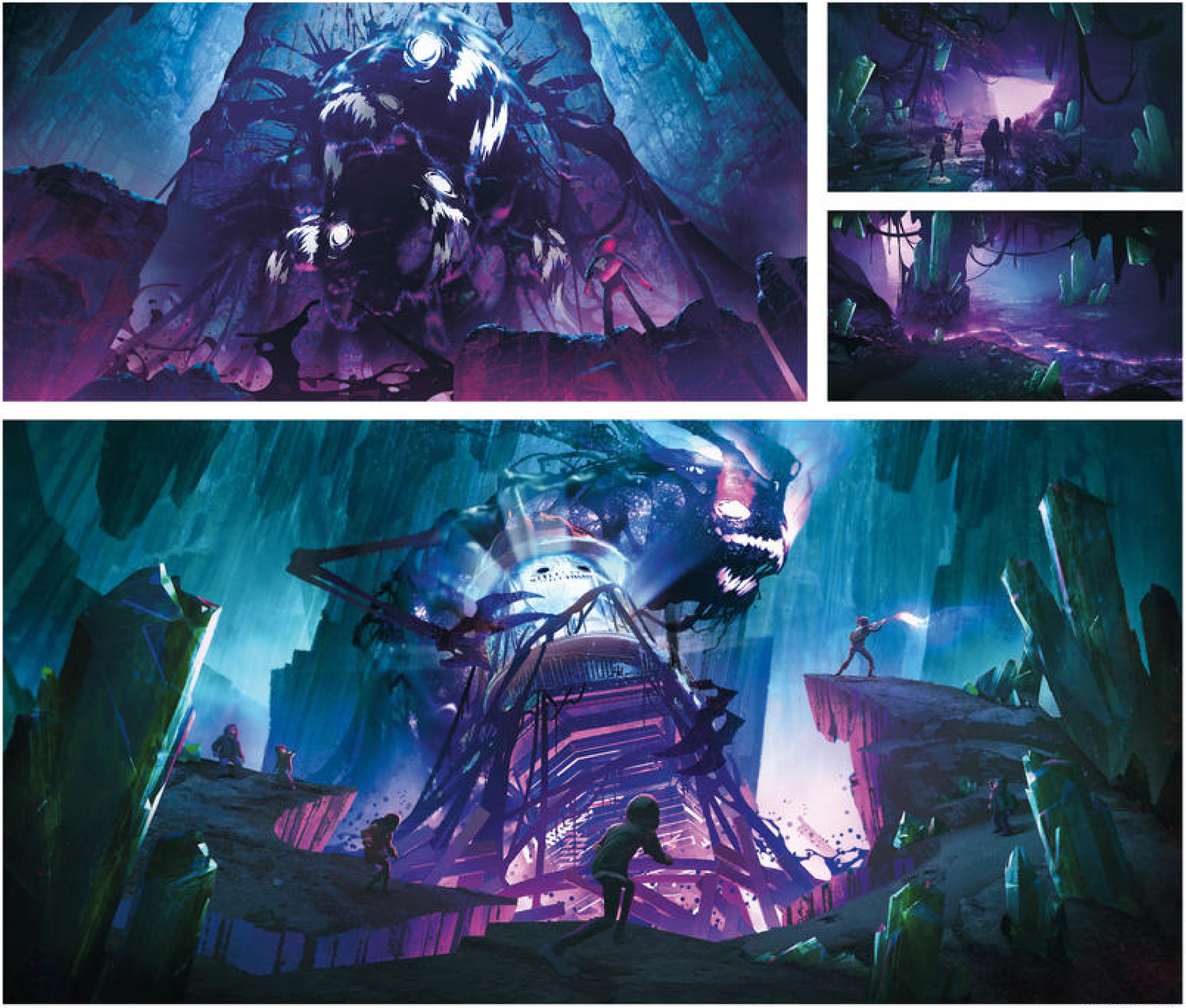
LUNA DARKNESS THREAT

A special gameplay sequence ends the game and challenges the player to paint quickly as the Darkness makes one last-gasp attempt at destroying her. It required some tweaks to the Darkness gameplay tech and visualization to accurately support the gameplay requirements.

ARTIST TAYLOR LAMBERT (TOP)



ARTIST JEFF SANGALLI (LEFT AND RIGHT)



ARTIST TAYLOR LAMBERT

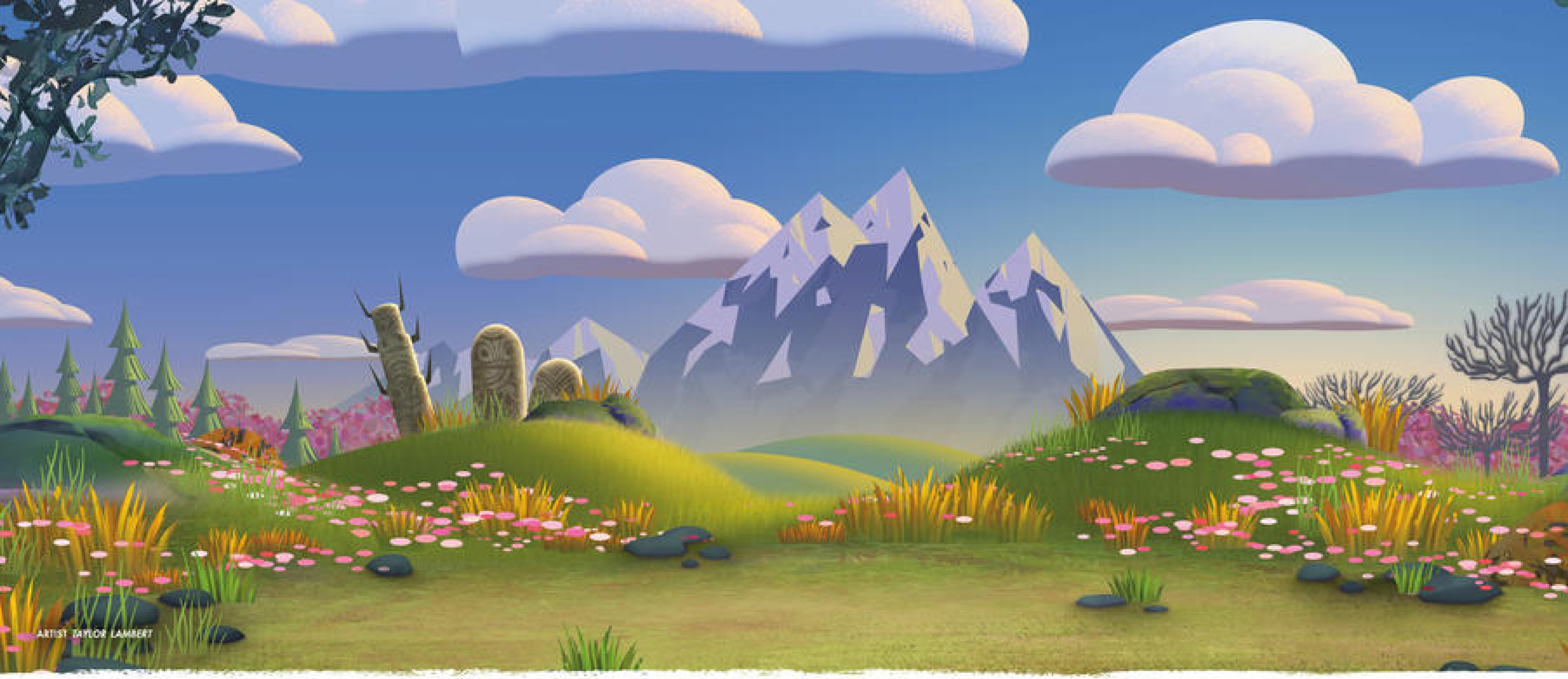
Initially, we wanted to bring Luna and the entire lighthouse down into the caves for the final boss battle. Although we changed the setup of this sequence, much of the intent remained.

ARTIST TAYLOR LAMBERT

CHAPTER 4

THE PLAYSTATION® VR EXPERIENCE

The new PS VR team, made up of old friends and new, has done an absolutely beautiful job of creating an immersive, dream-like experience for *Concrete Genie* in VR. When Jeff Brown, VR creative director, and Dave Smith, VR art director, started the VR team, they kept coming back to the same question: what if you as a player could step into one of Ash's paintings? What follows is a look into the process of creating a virtual-reality experience that starts in the town of Denska and pulls the player through their own painting into a magical world.



ARTIST TAYLOR LAMBERT

ABOUT VR AND THE VR TEAM

Early on in development our small VR team found that Ash's brush works really well in VR. There's something about picking up the controller and wielding it as a magic paintbrush that feels really satisfying. We took iconic locations from Denska and created VR free-paint environments where the player can express their creativity.

The ability to travel into a painting you created became the foundation of our VR experience. Adding this ability for the player to transition into a 3D world and continue to create there presented the opportunity to develop a unique look for the new location and its flora and fauna.

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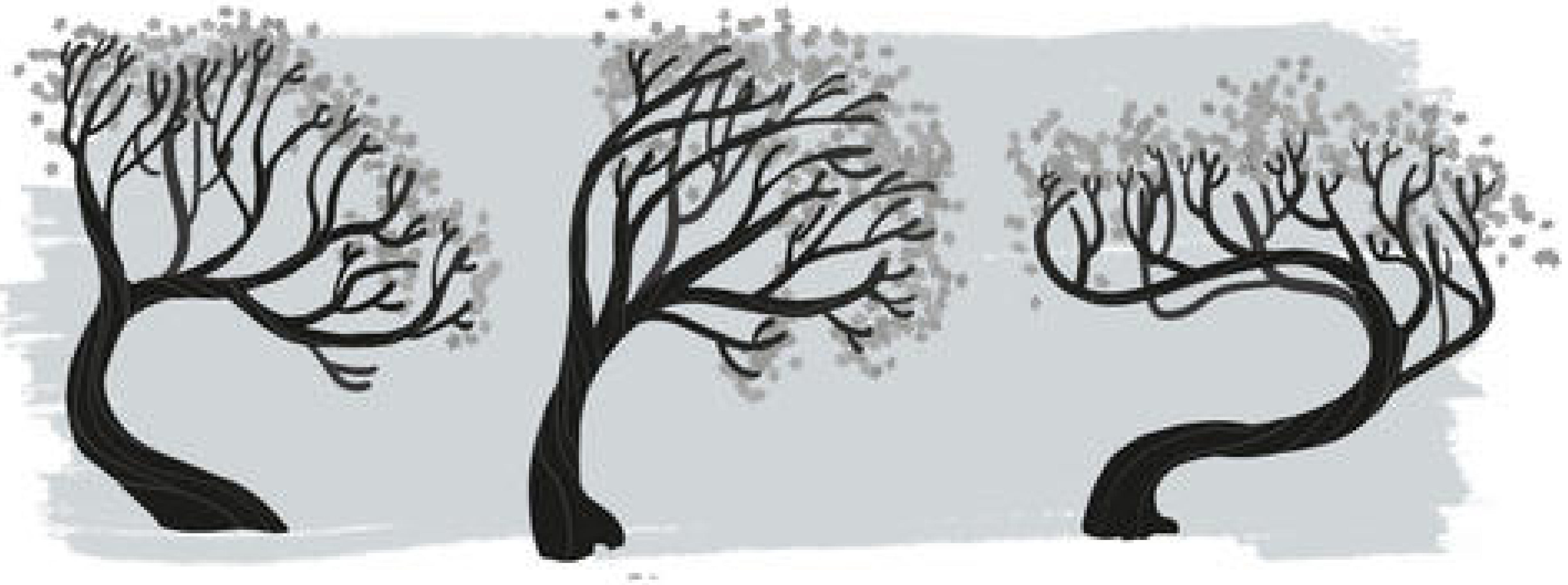
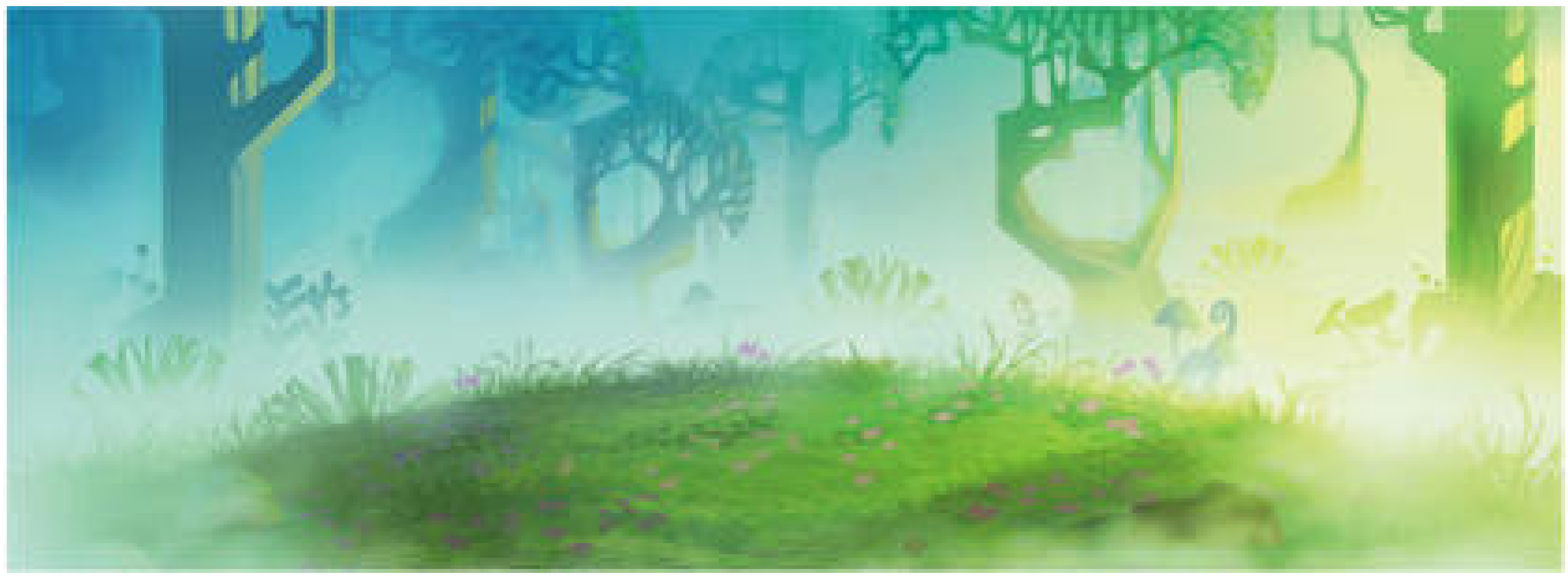
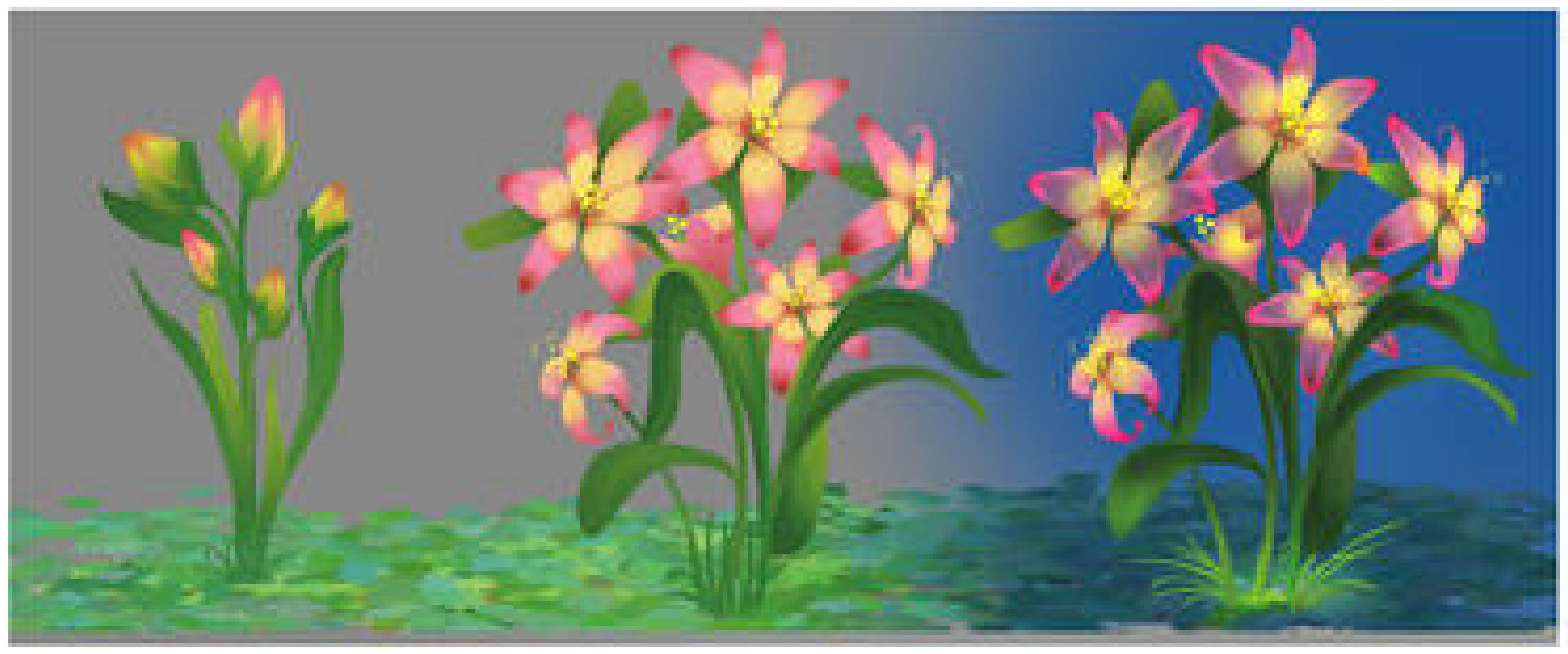
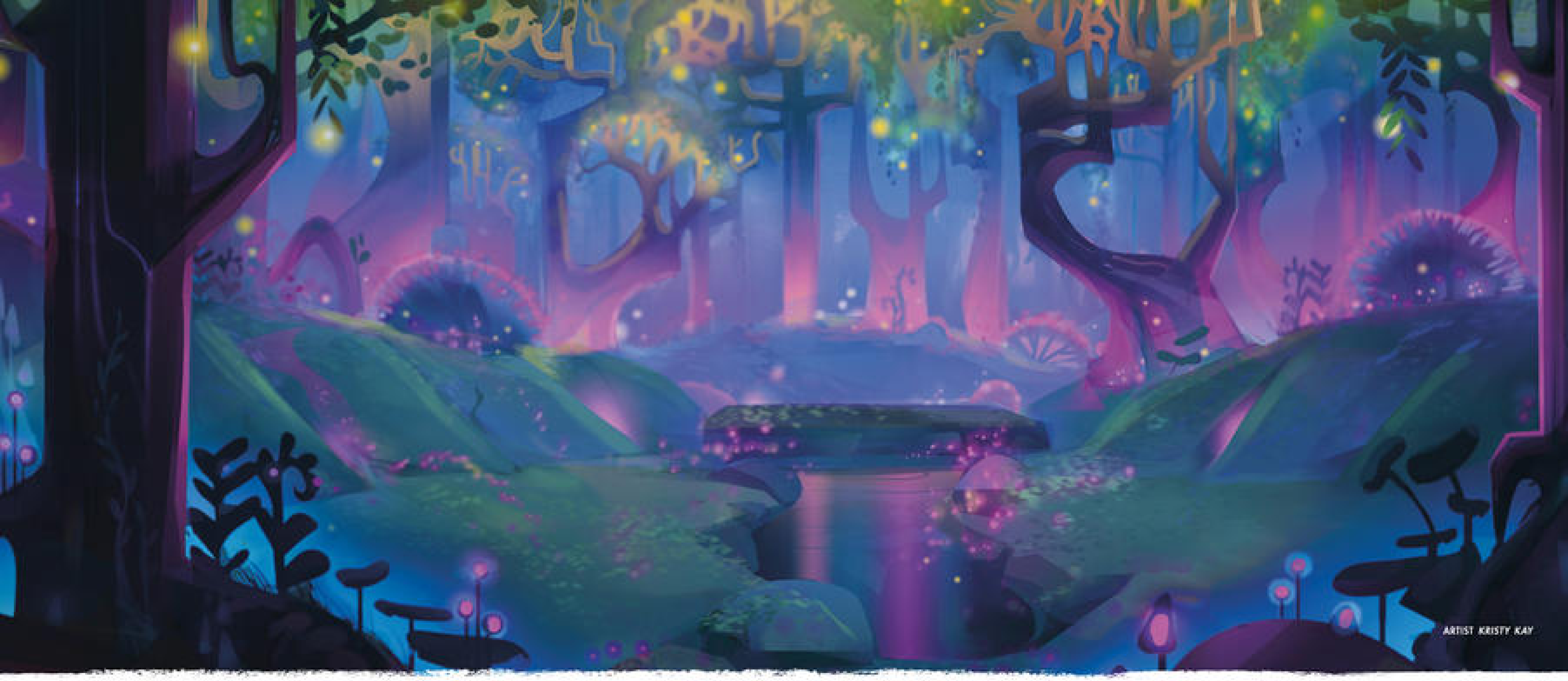
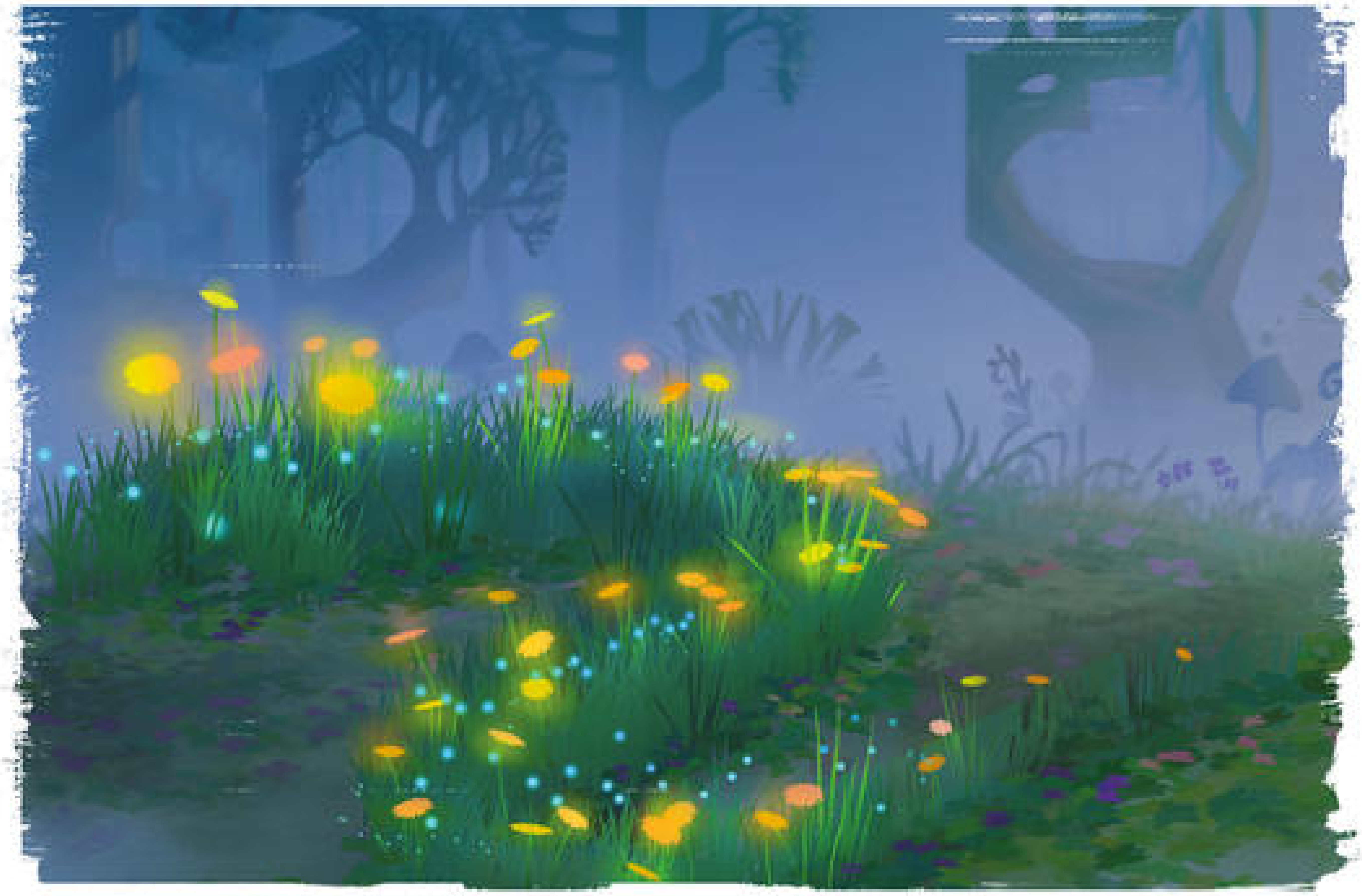


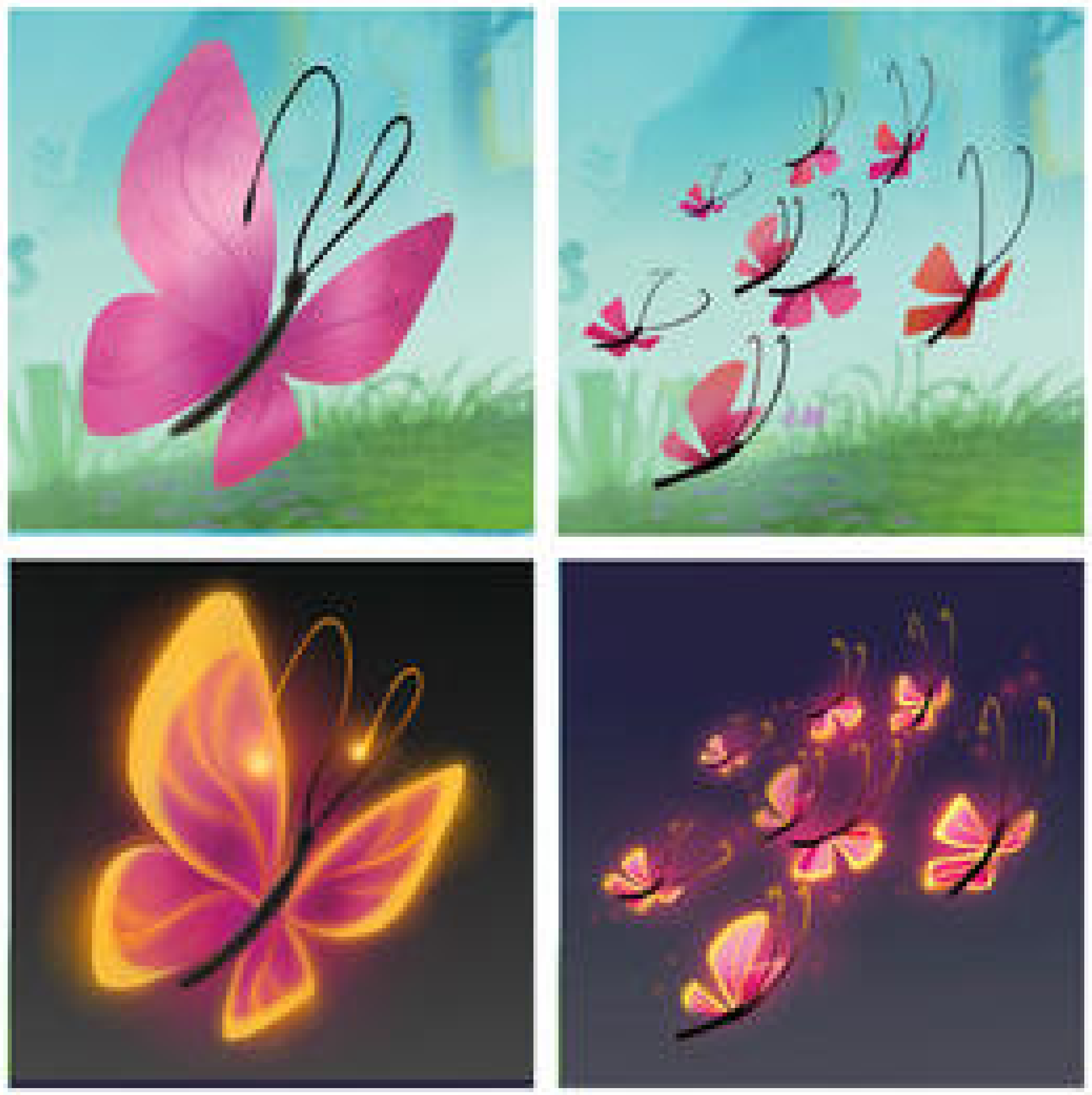






ARTIST KRISTY KAY





The world of the experience is full of magic. That idea is central to the visual design of plants and creatures: natural forms mixed with otherworldly glows and magical effects.

CONCEPT ANIMATION

Painting in 3D is like growing plants with your brush. The challenge is in finding the right balance between natural-looking growth and responsive player control. Previsualization image sequences are the first step in that process.

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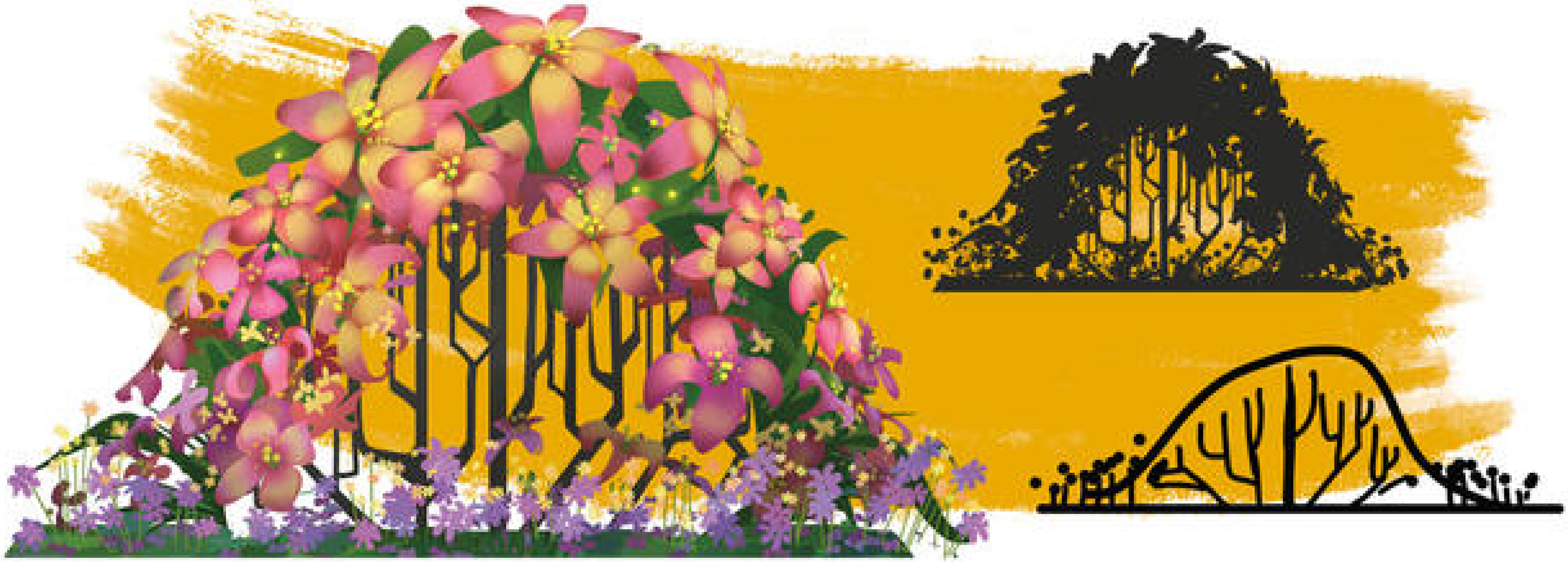
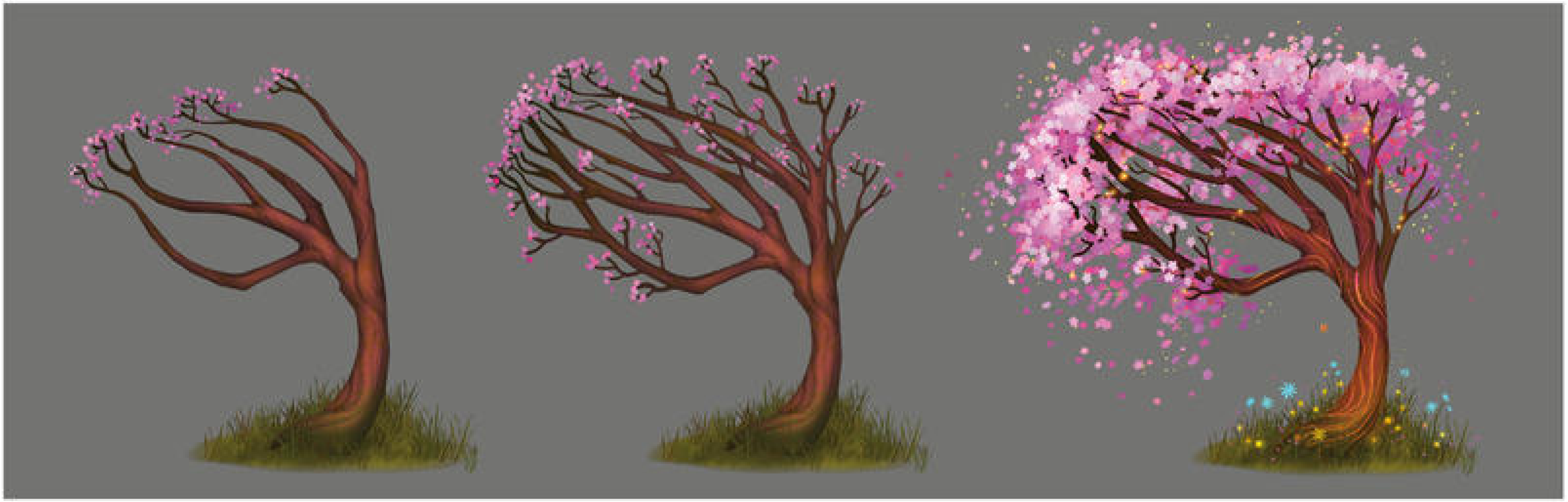
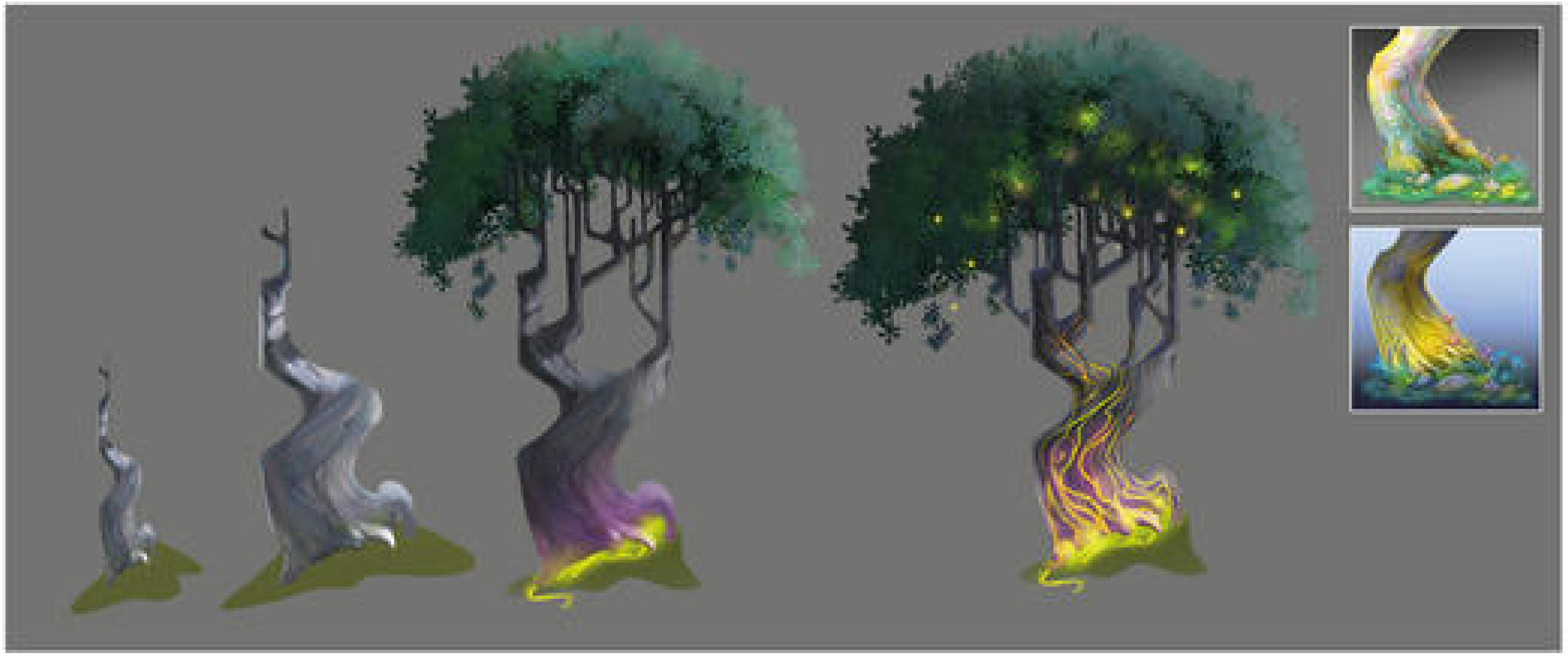
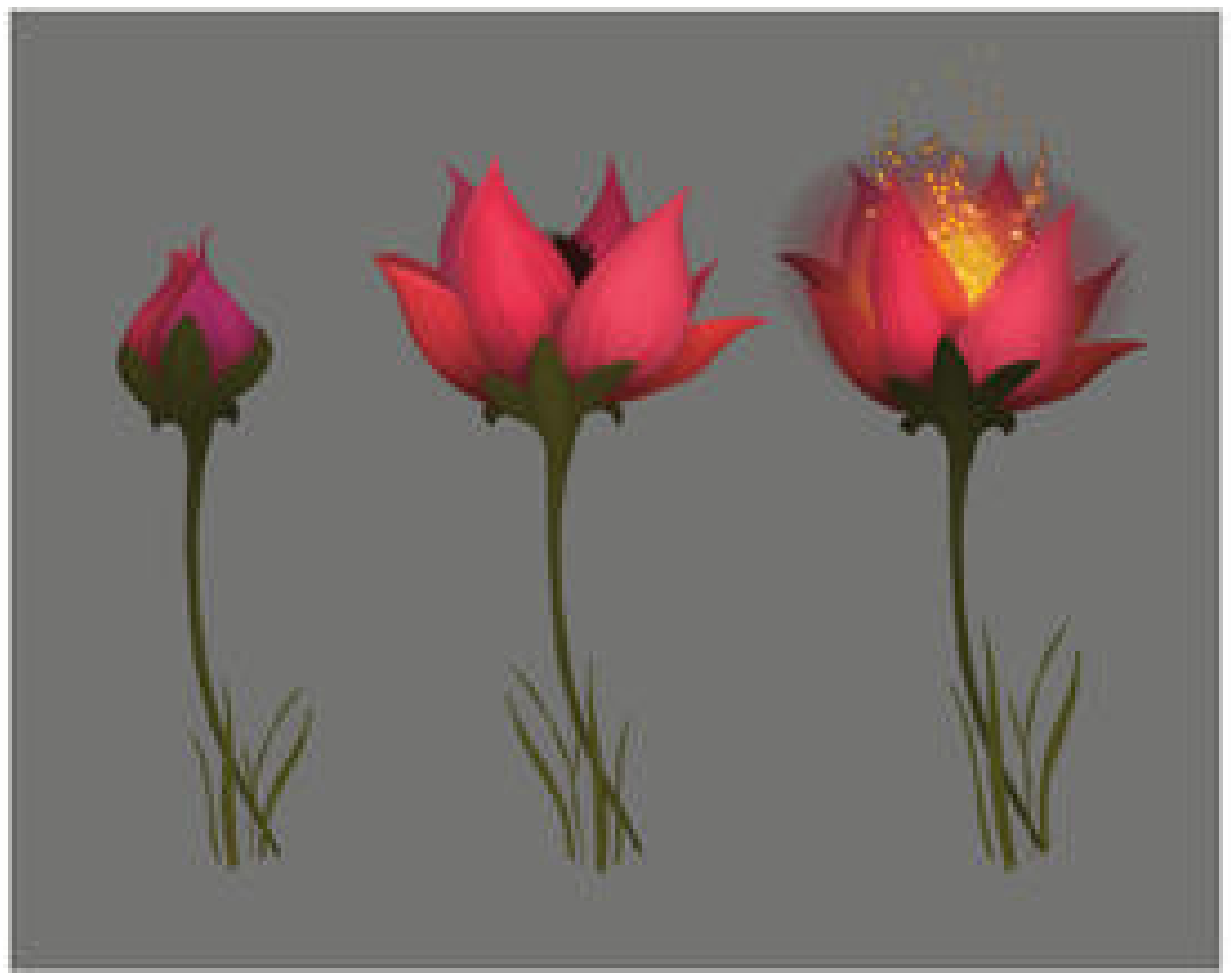
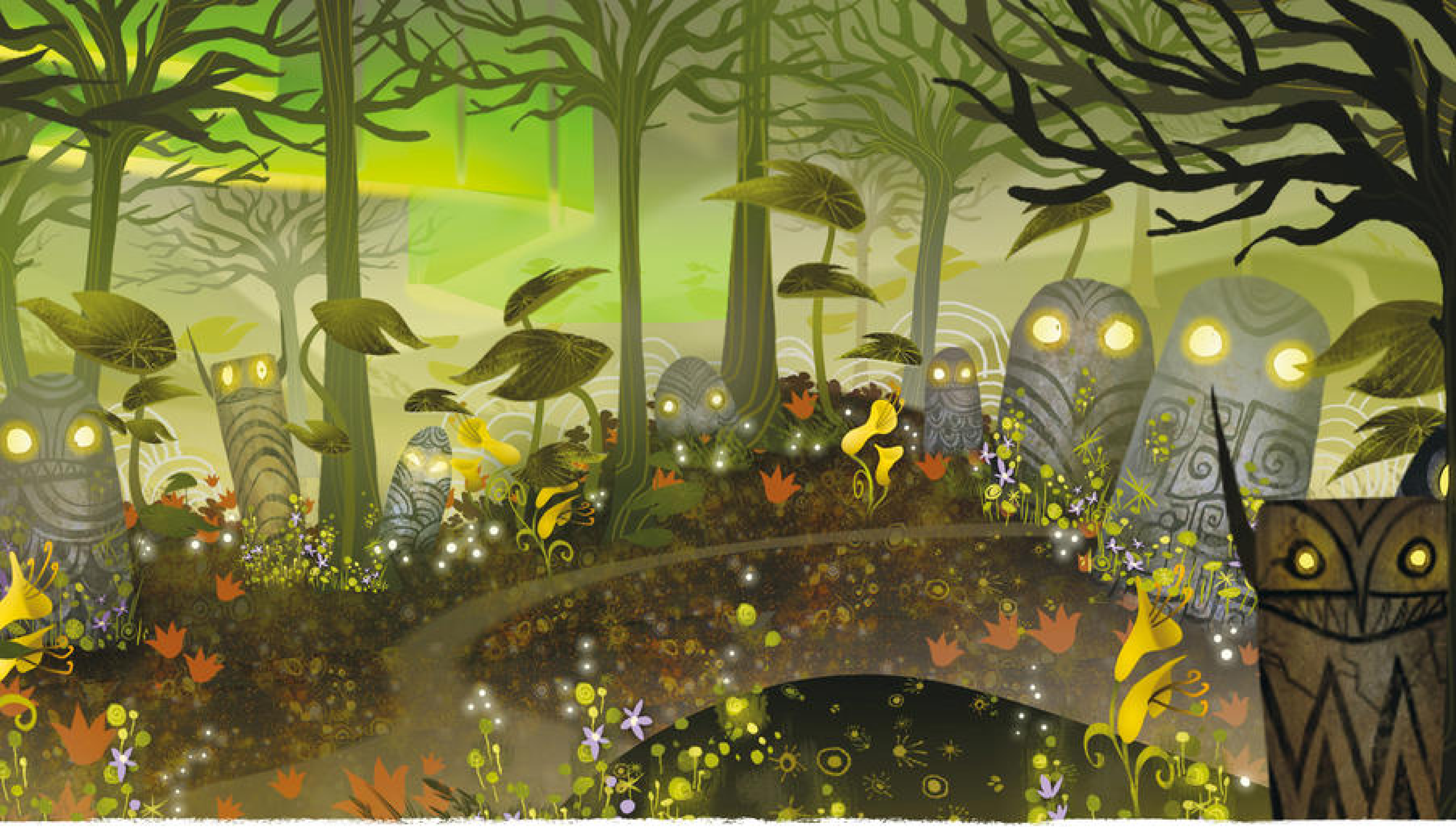
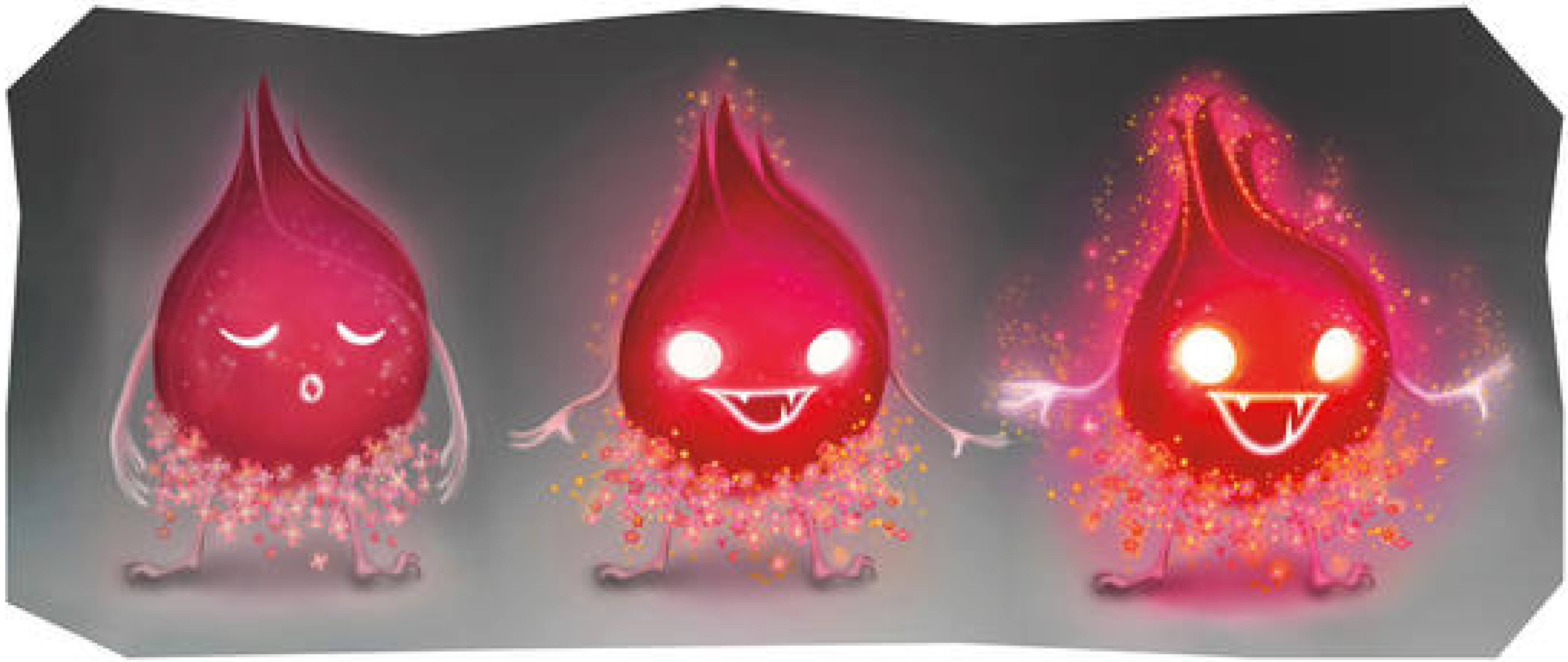






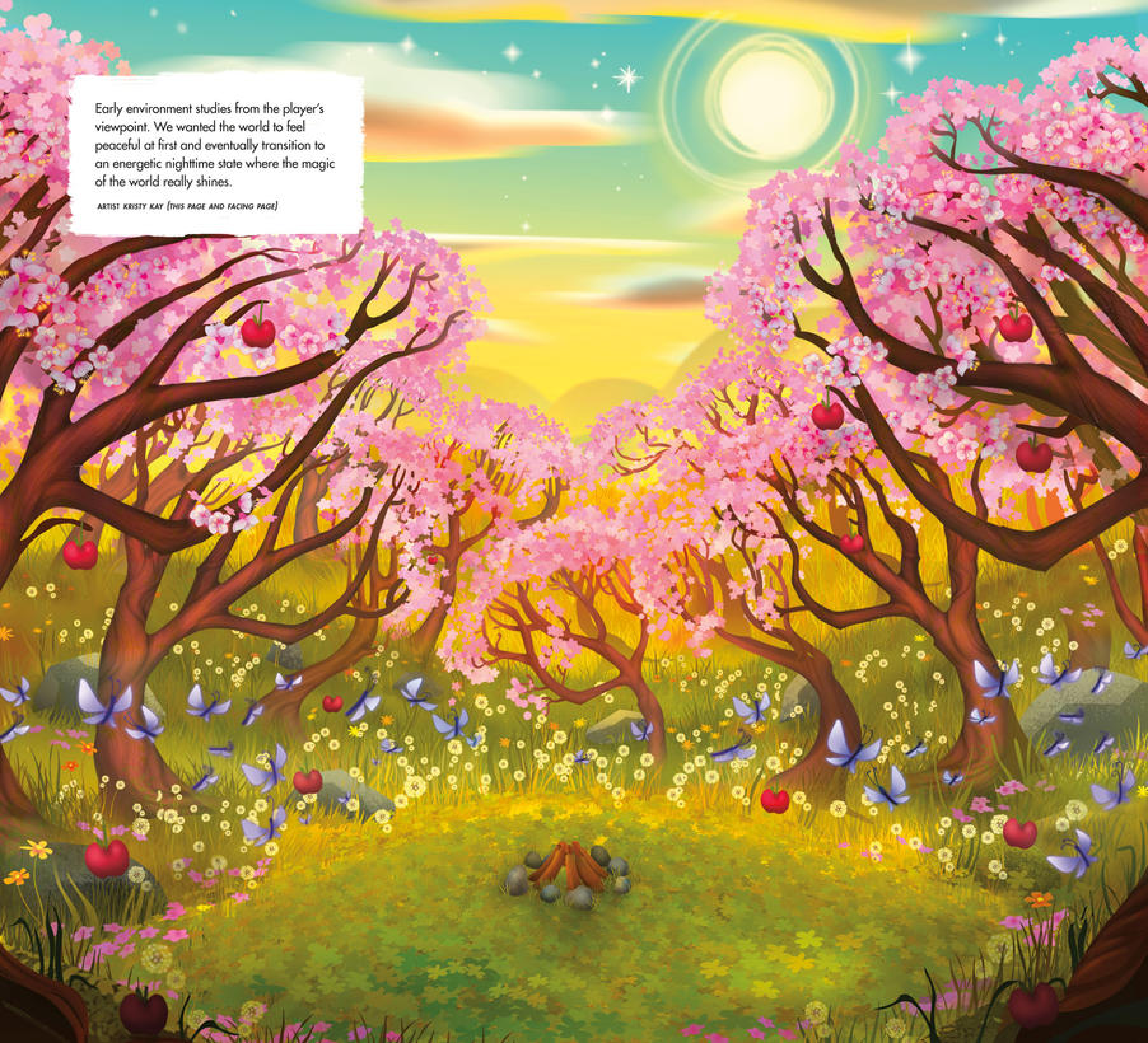






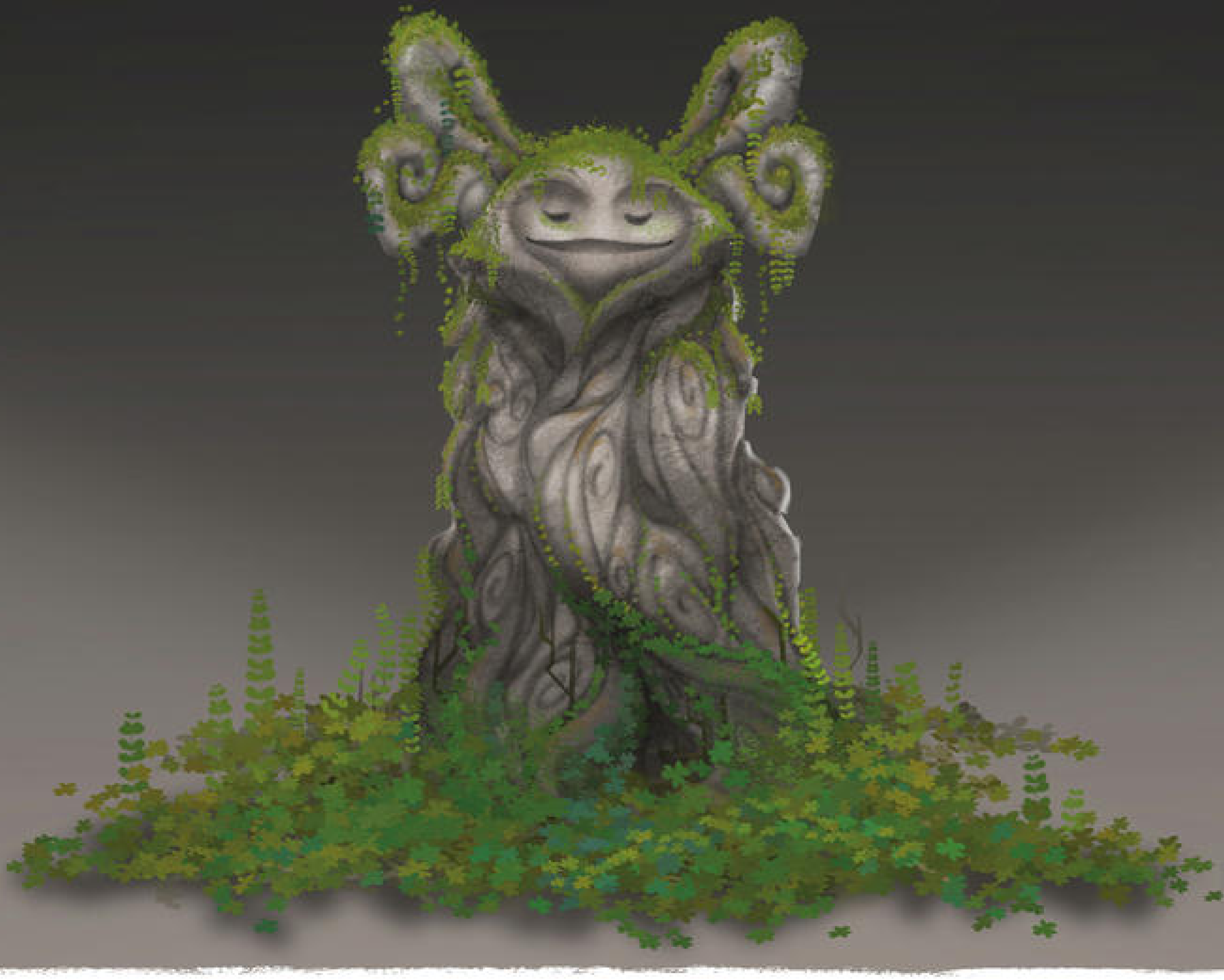
BRINGING SPLOTCH TO LIFE IN VR

Mischievous, cute, curious—Splotch is your guide through the VR experience. Translating this 2D character into 3D was a really gratifying process that involved the whole VR team: art, game design, animation, and engineering.



Early environment studies from the player's viewpoint. We wanted the world to feel peaceful at first and eventually transition to an energetic nighttime state where the magic of the world really shines.

ARTIST KRISTY KAY (THIS PAGE AND FACING PAGE)



VISUAL DEVELOPMENT

An early design for Luna as she might appear in the 3D world. The player would discover her dormant and by painting the world bring her into her full power.

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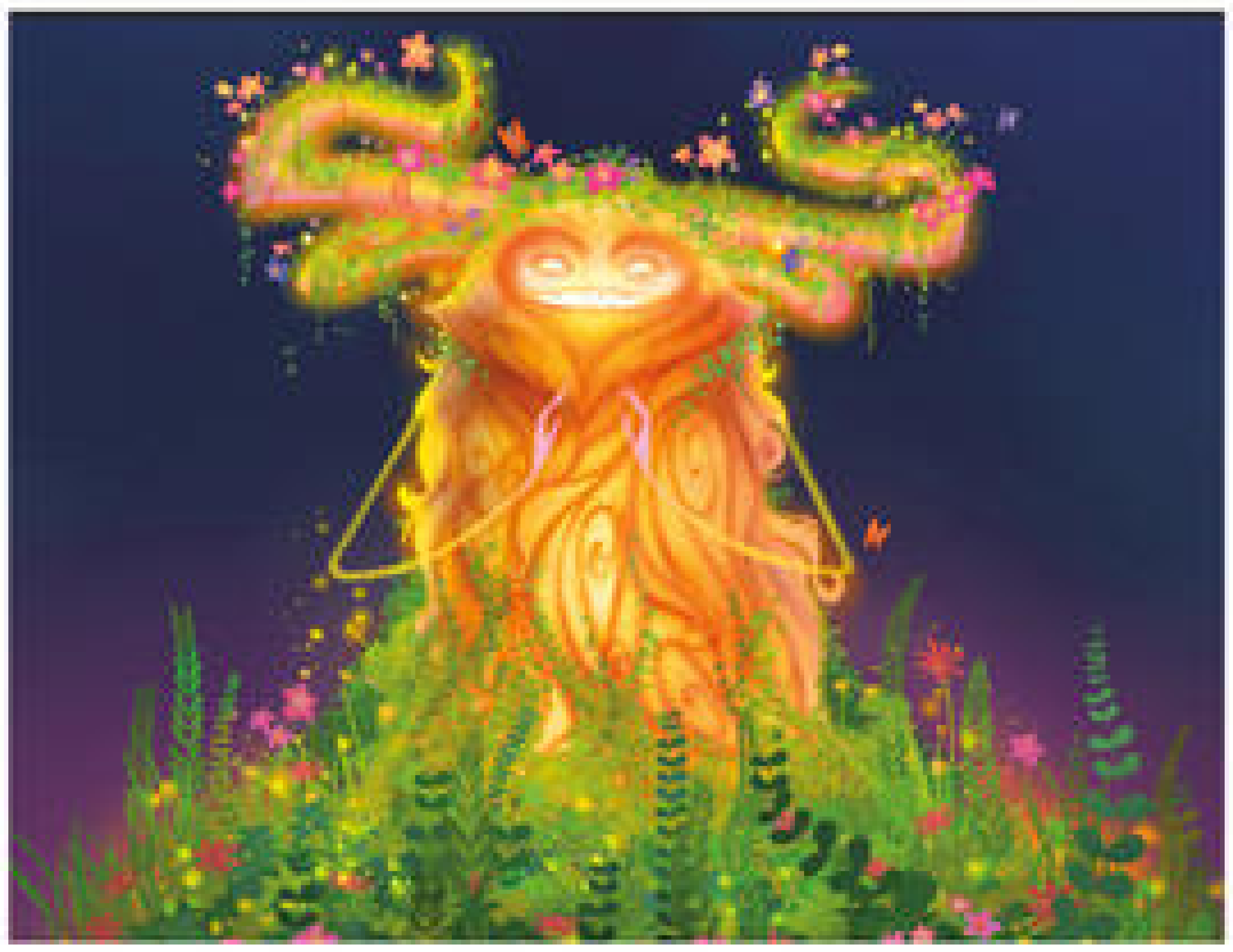
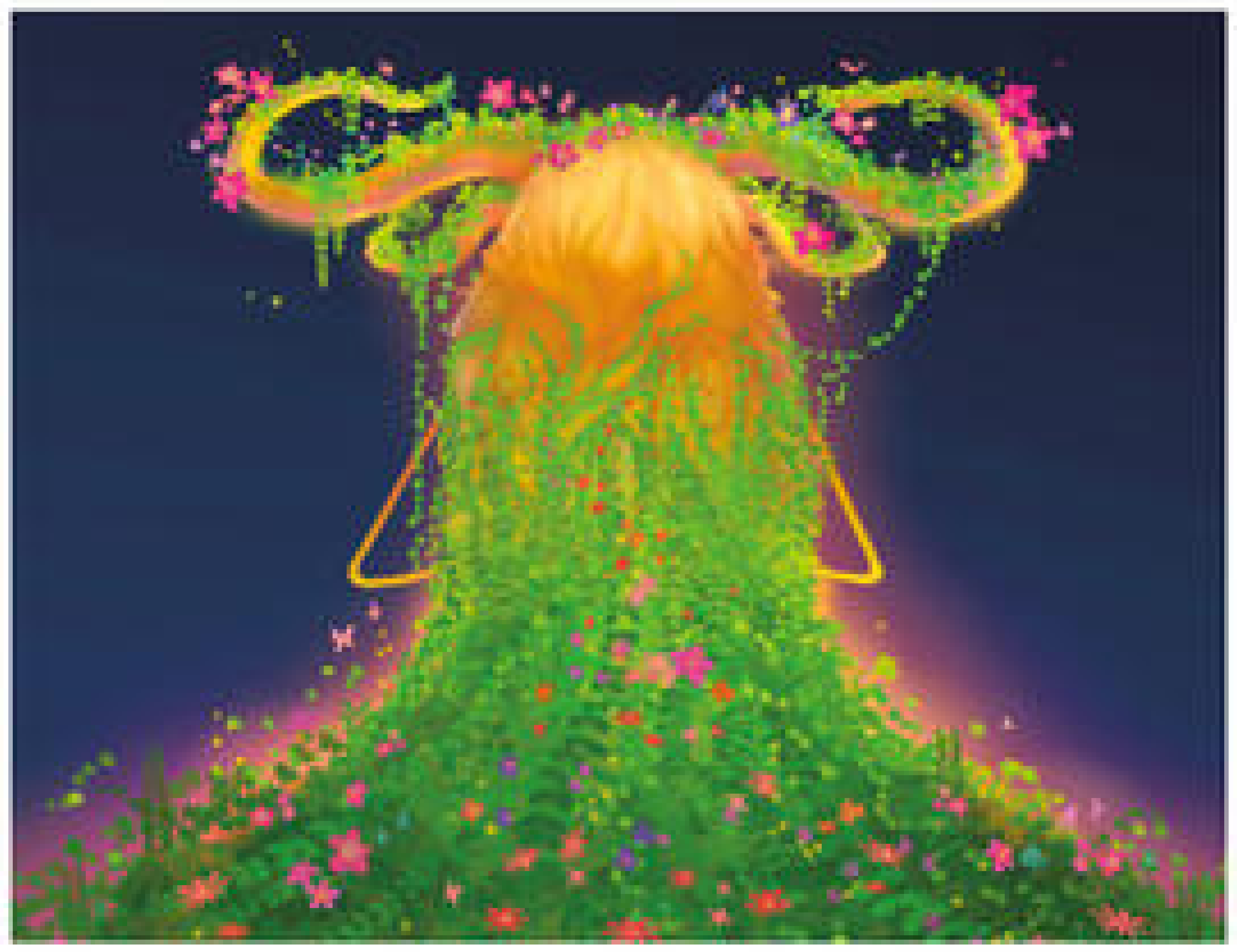
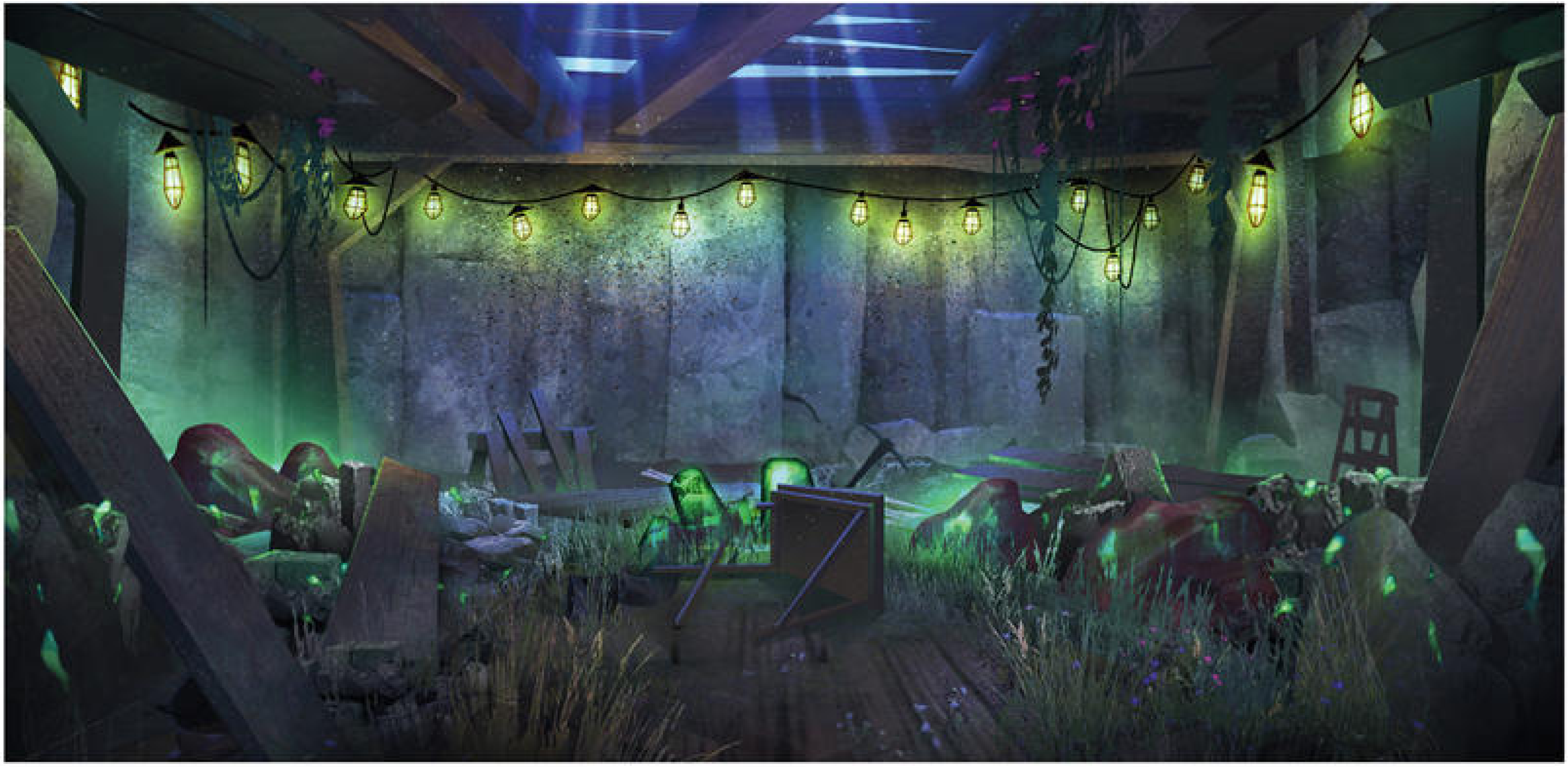
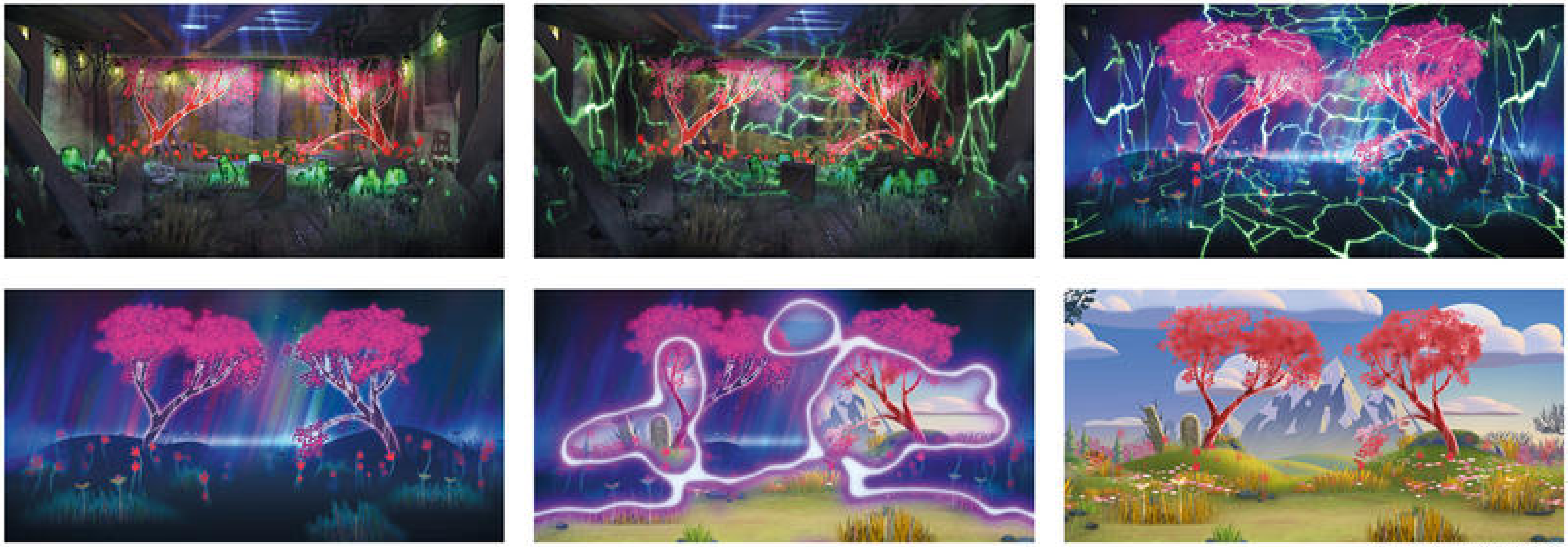


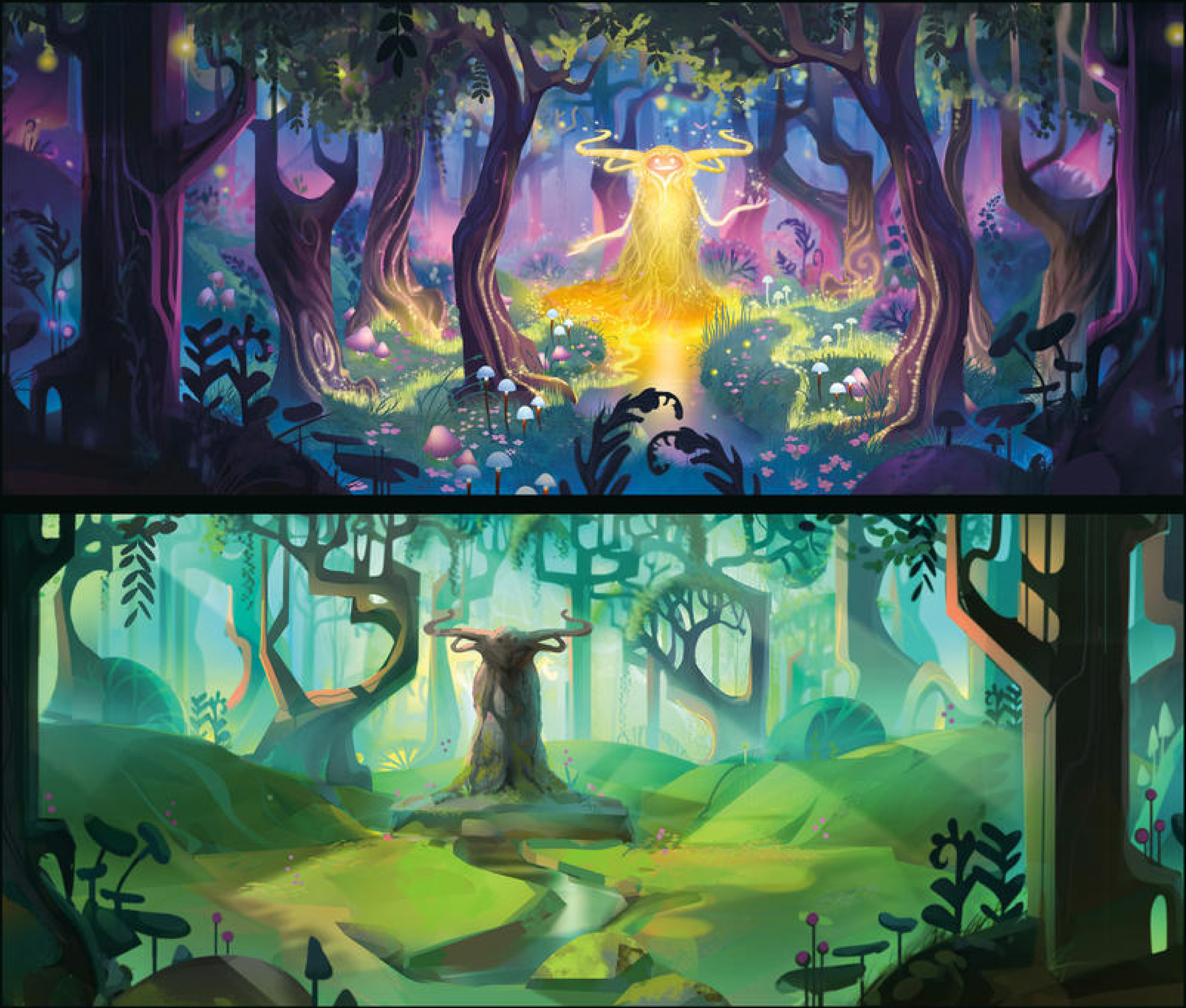




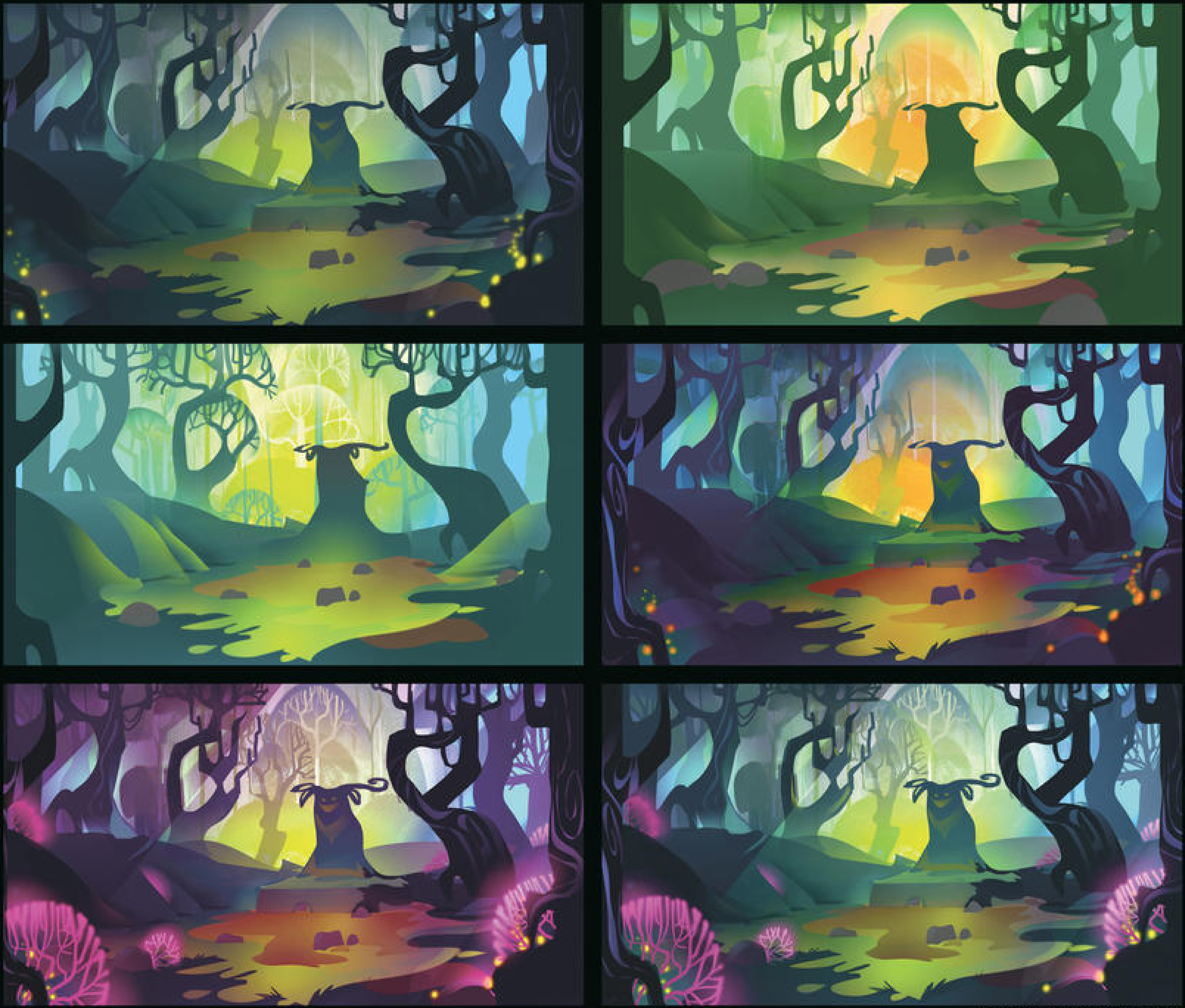


ARTIST TAYLOR LAMBERT (THIS PAGE)

Transitioning from 2D painting into a 3D world was technically complex. Large painting elements such as trees and ground would persist from 2D to 3D to give the player a sense of continuity.

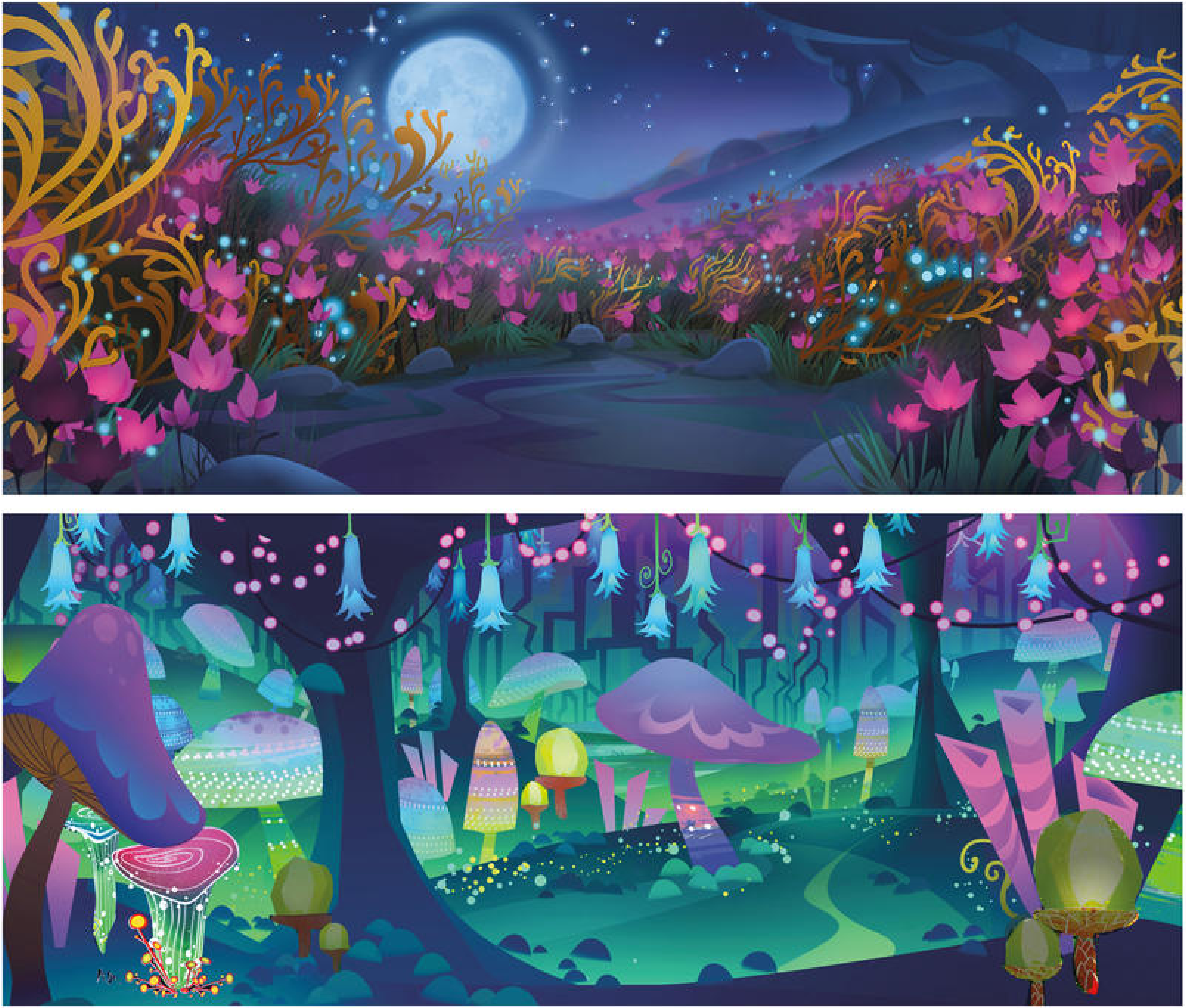


An early incarnation of the world in its two states. The player would arrive in daytime and through painting bring the whole world to magical life as the sun went down.

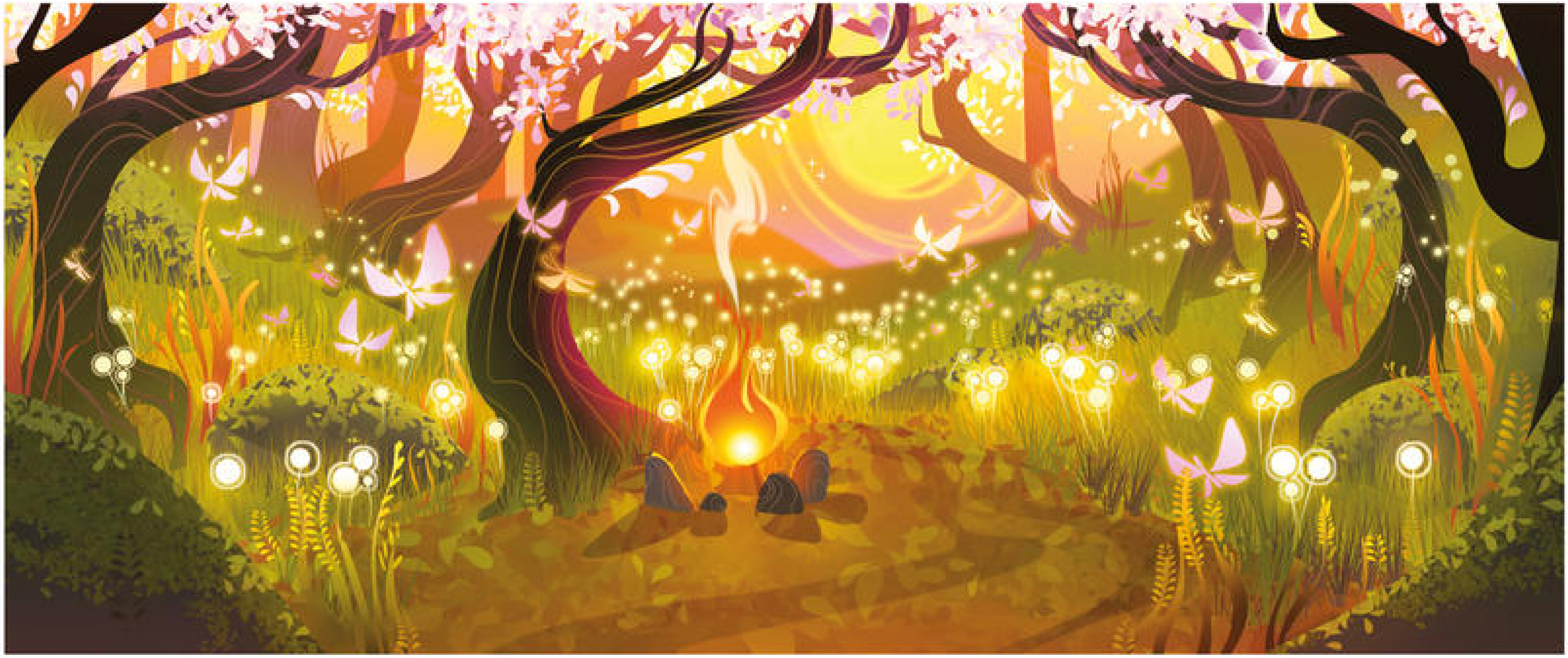


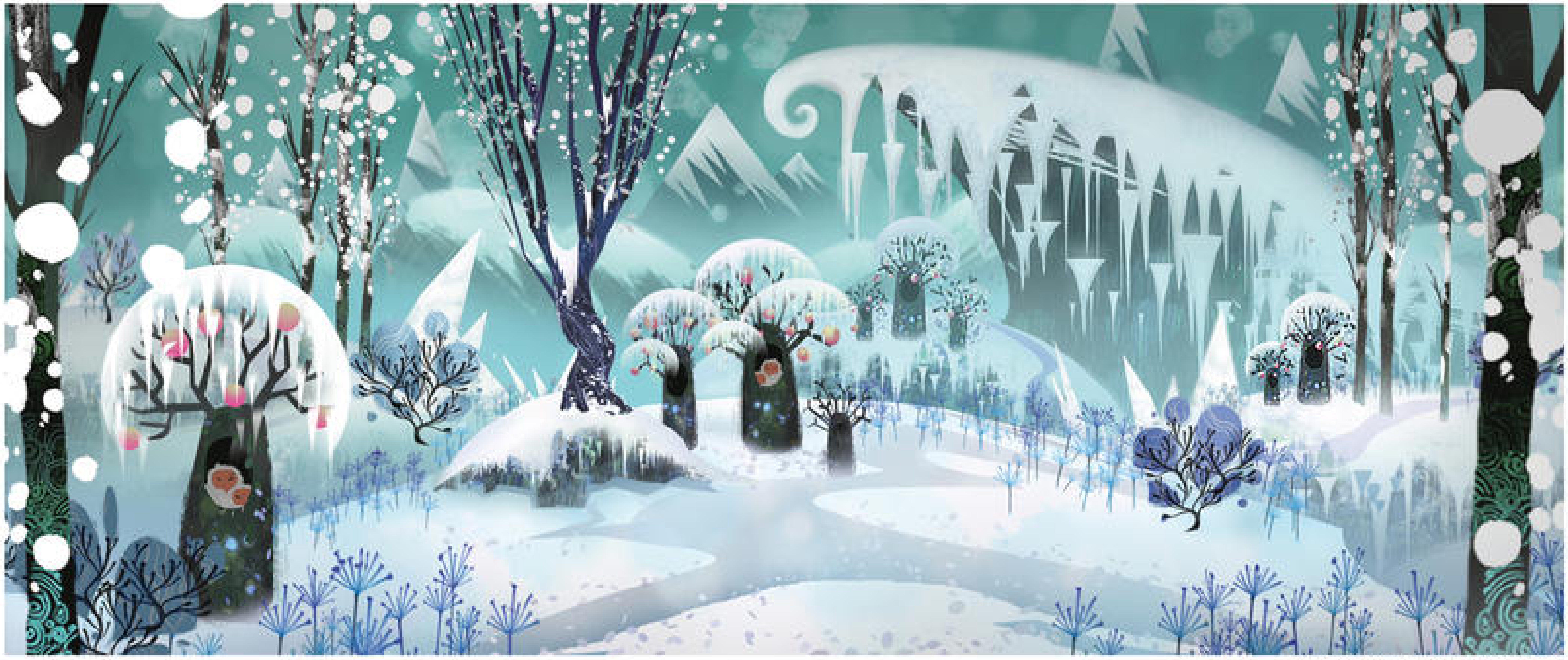
ARTIST KRISTY KAY (THIS PAGE AND FACING PAGE)

Color studies for the magical state of the world. This was an exercise in balance: wild, moody, and colorful but not threatening. Ultimately, we went with a different layout and softer shapes.



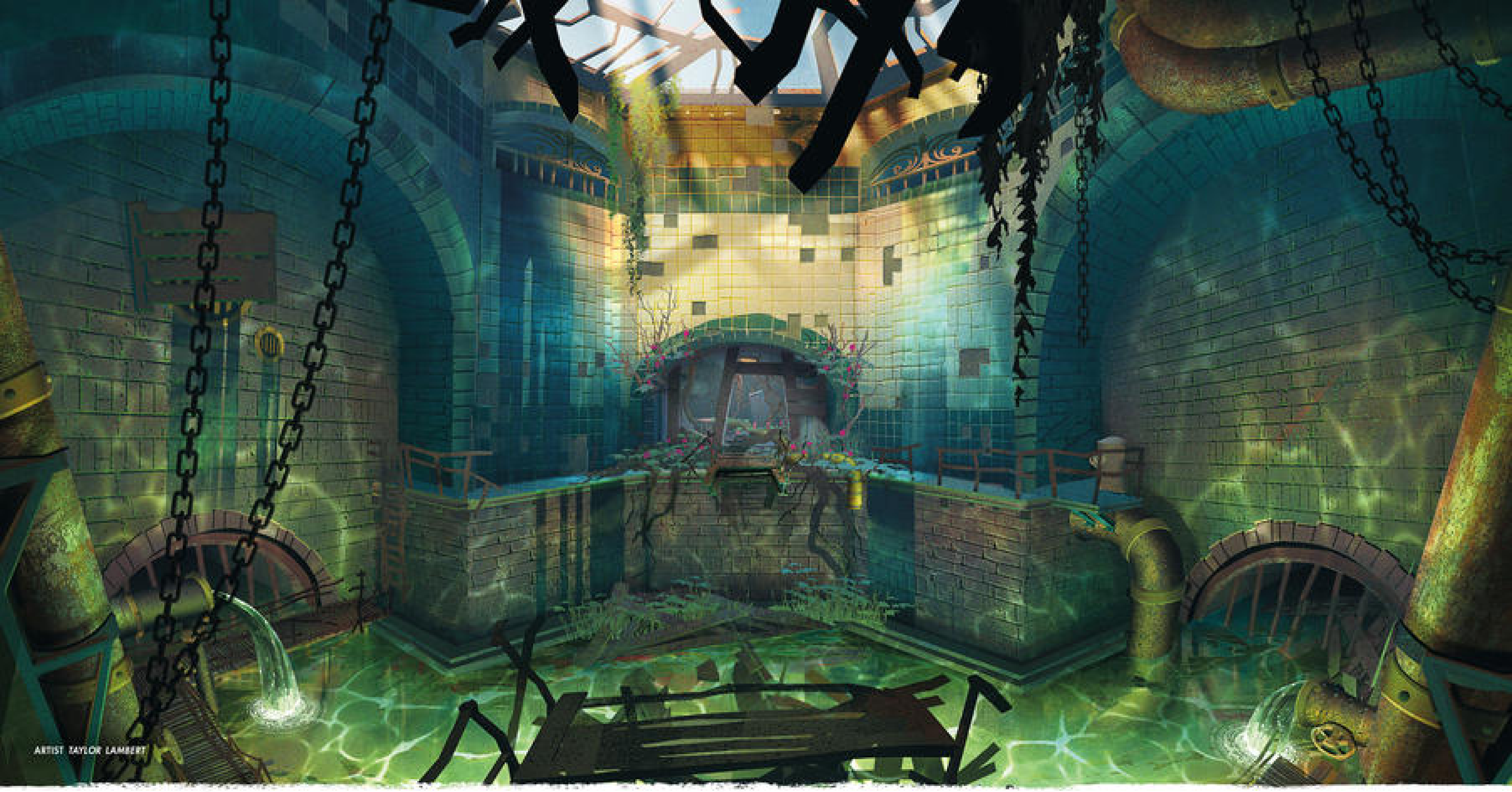
Look-development for the world. Early on, we considered multiple states for the world themed after the design biomes. As the player progressed, they would affect the world through the use of certain designs.



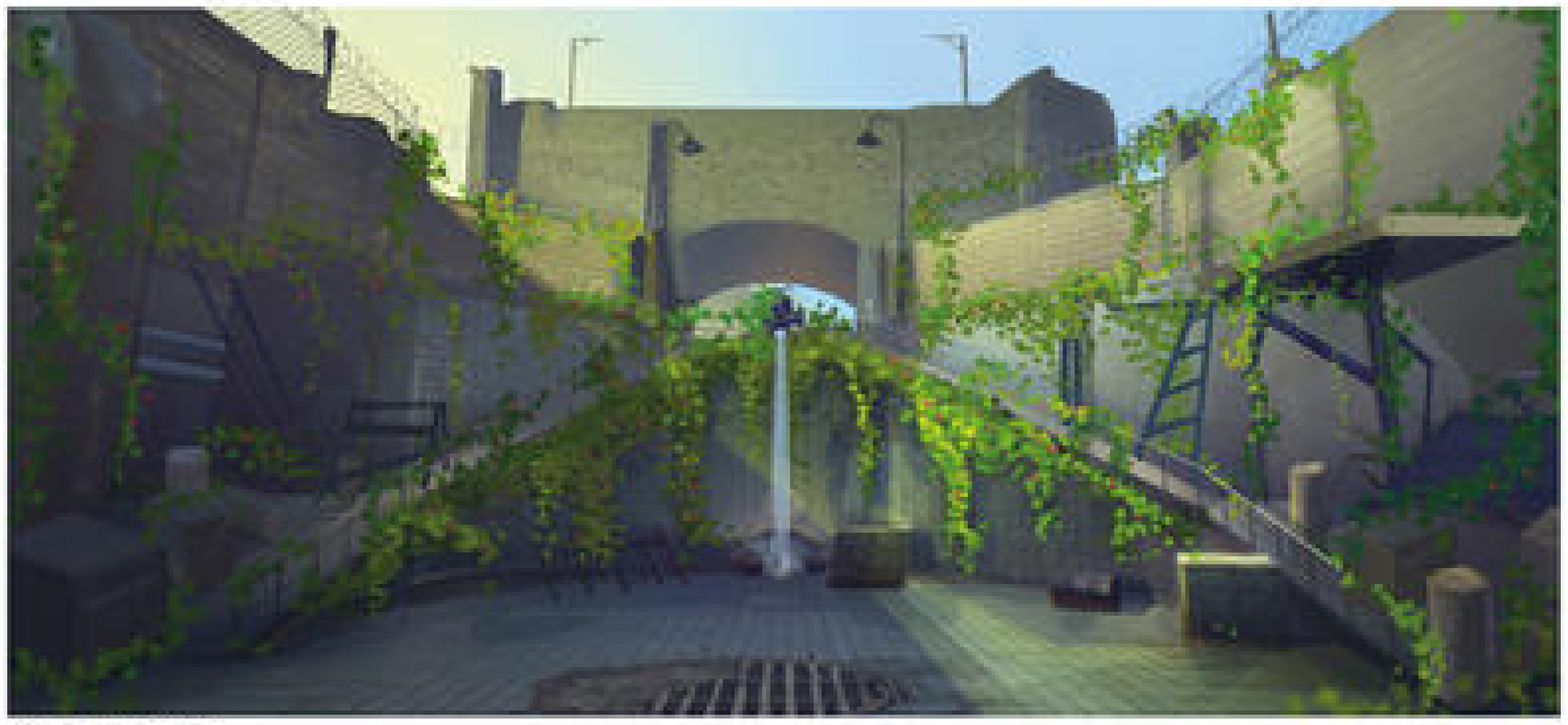


ARTIST KRISTY KAY (THIS PAGE AND FACING PAGE)

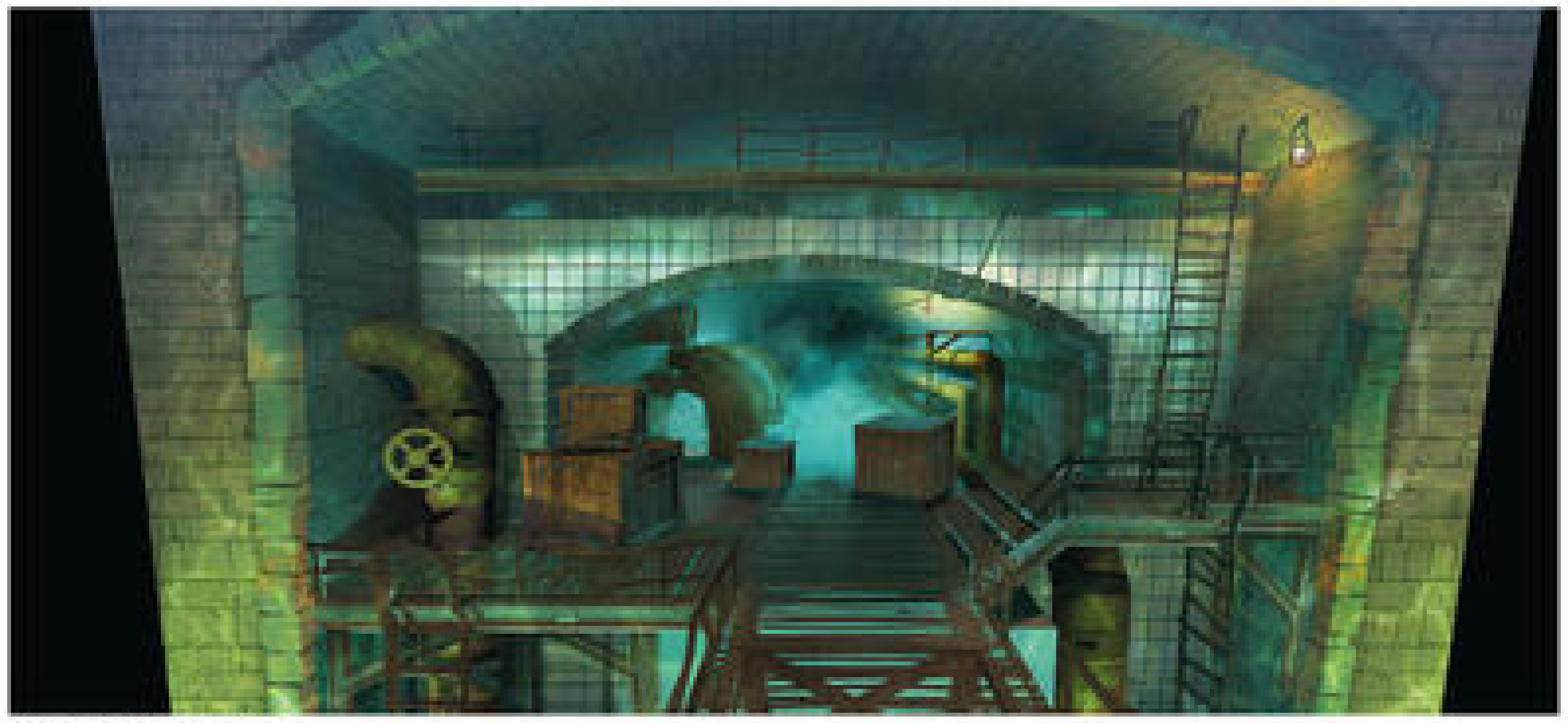
This limited the player's expressivity so we went in a different direction. Keeping a balance between directed narrative and player freedom was one of our hardest challenges. Ideas were constantly being tested to maintain that balance.



ARTIST *TAYLOR LAMBERT*



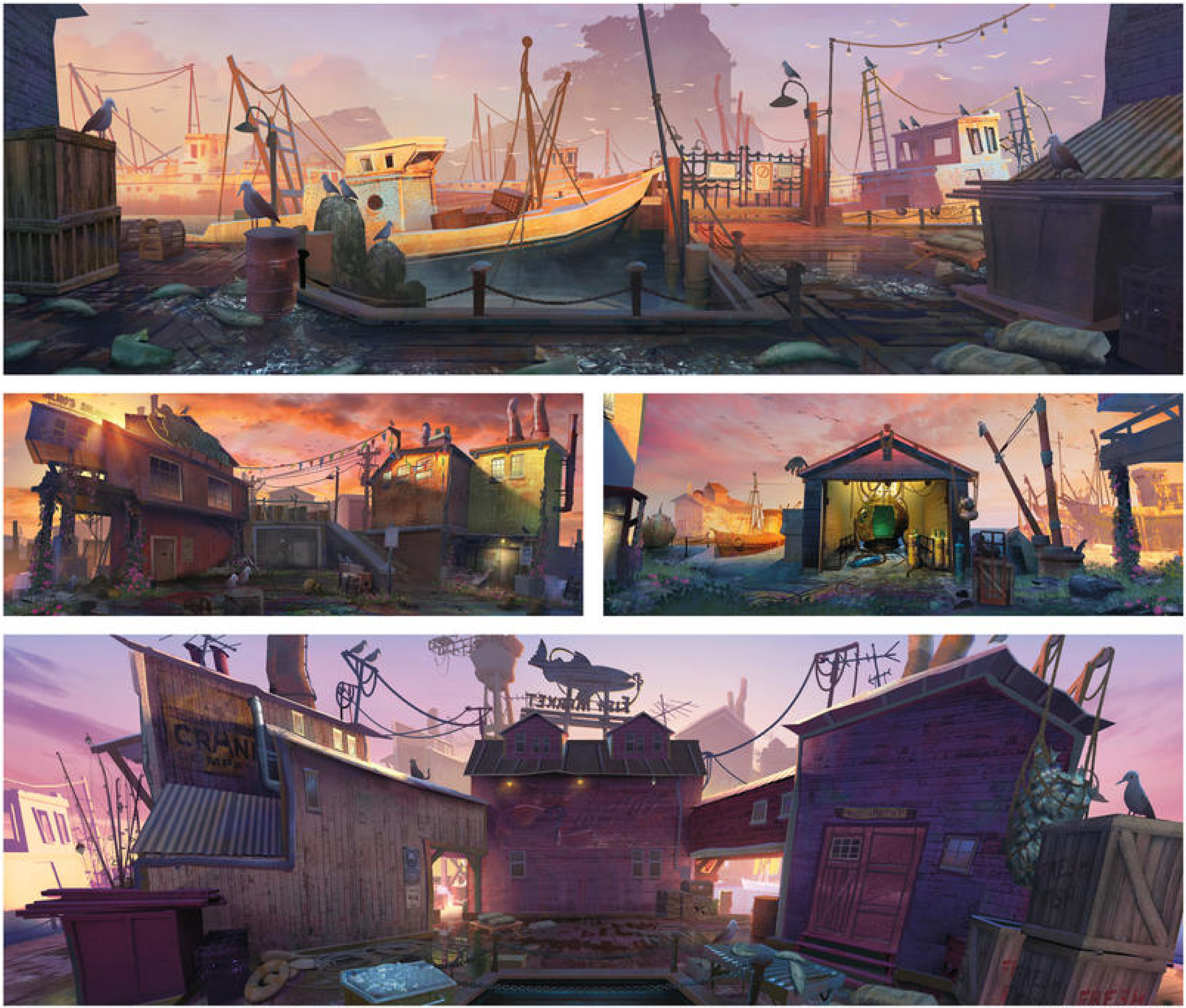
ARTIST *KRISTY KAY*



ARTIST *TAYLOR LAMBERT*

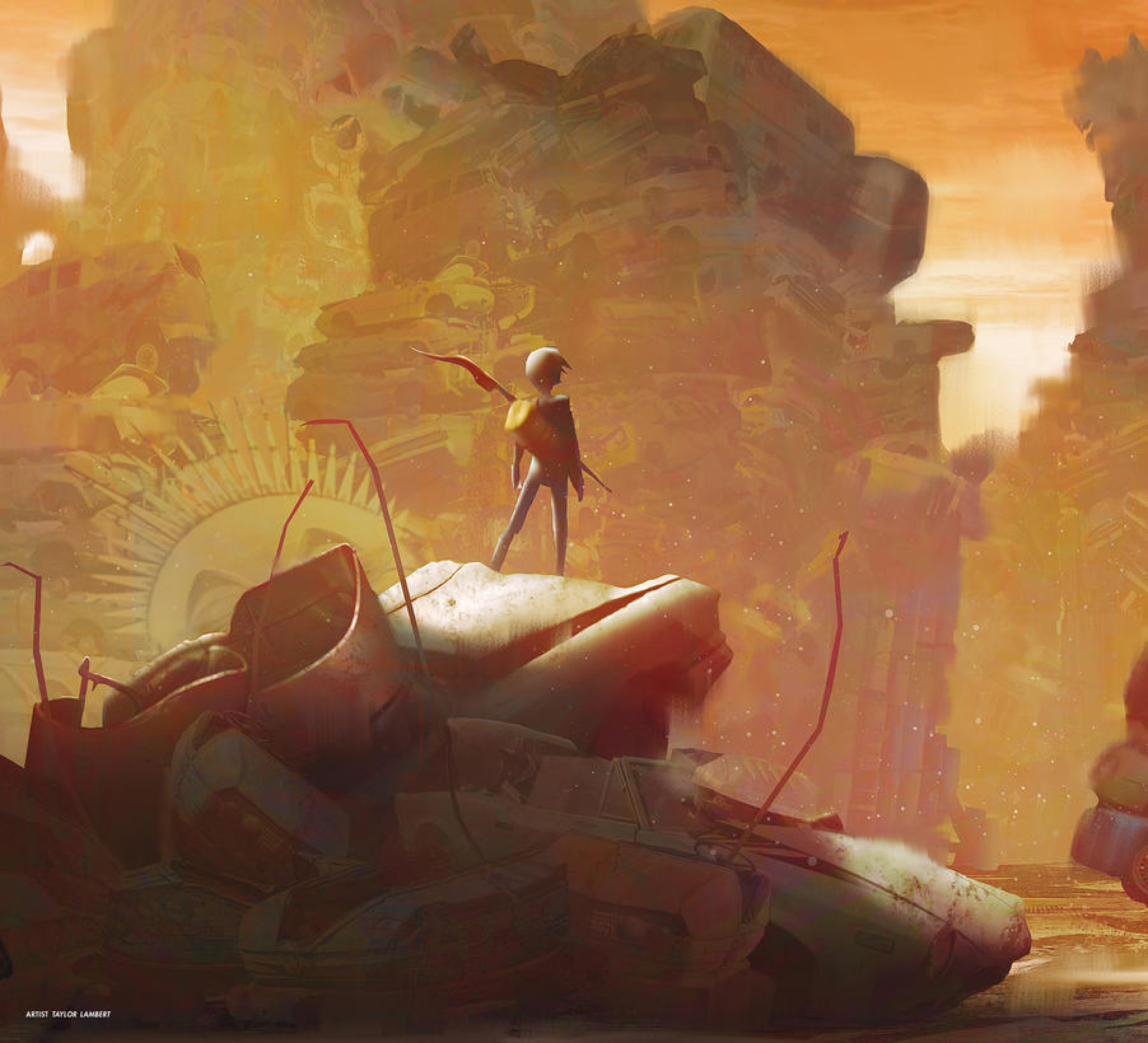
VR FREE PAINT

Denska provided the inspiration for our free-paint environments. These locations are designed to be "just around the corner" from places in the non-VR game; they feel like Denska but they're unique to VR.



ARTIST TAYLOR LAMBERT (THIS PAGE)

VR demands careful environmental design: scale and placement of elements, use of shape and lighting, and a respect for the player's reach. The free-paint environments are tailored to a comfortable, fun, and beautiful painting experience.

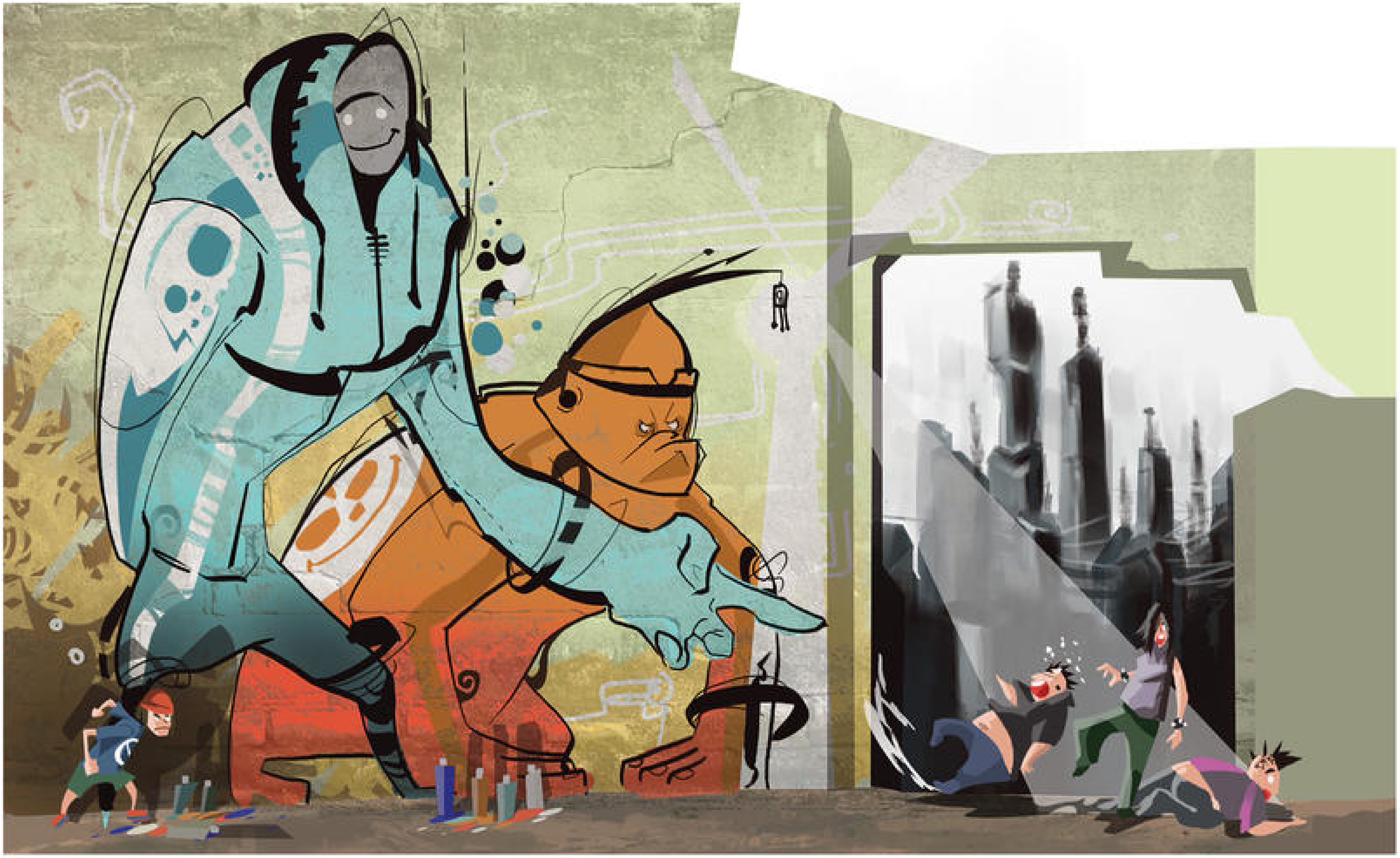


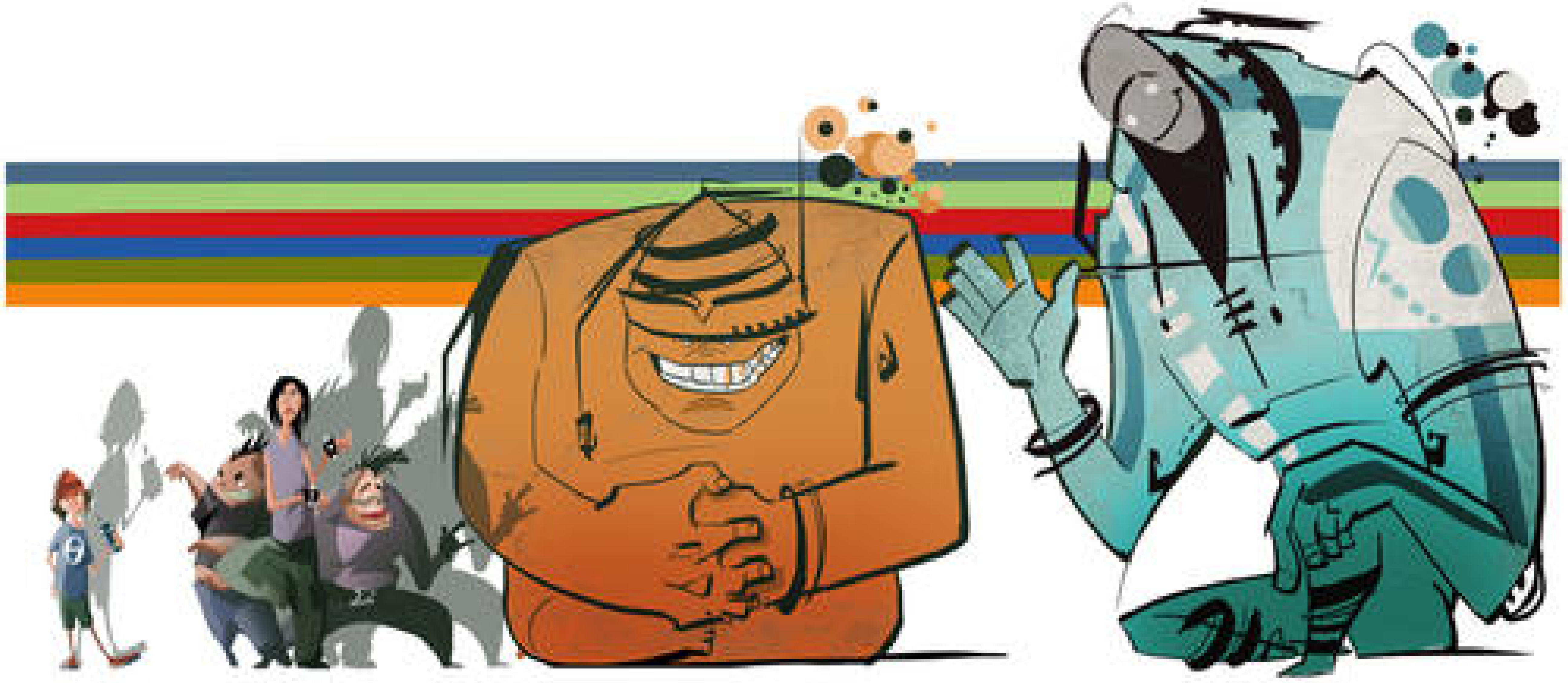
ARTIST *TAYLOR LAMBERT*

CHAPTER 5

MAKING OF

Looking behind the scenes of any game is always fascinating, but with this window into the game's history, you are also looking at the journey of a young team growing quickly from student level into professional game makers. We have included glimpses into previous painting mechanics that led us to where Living Paint ended up. The charm of the animated paint splotch faces survived into the finished game, and was a key inspiration in the tools that we developed to animate all the Genies in the end product.

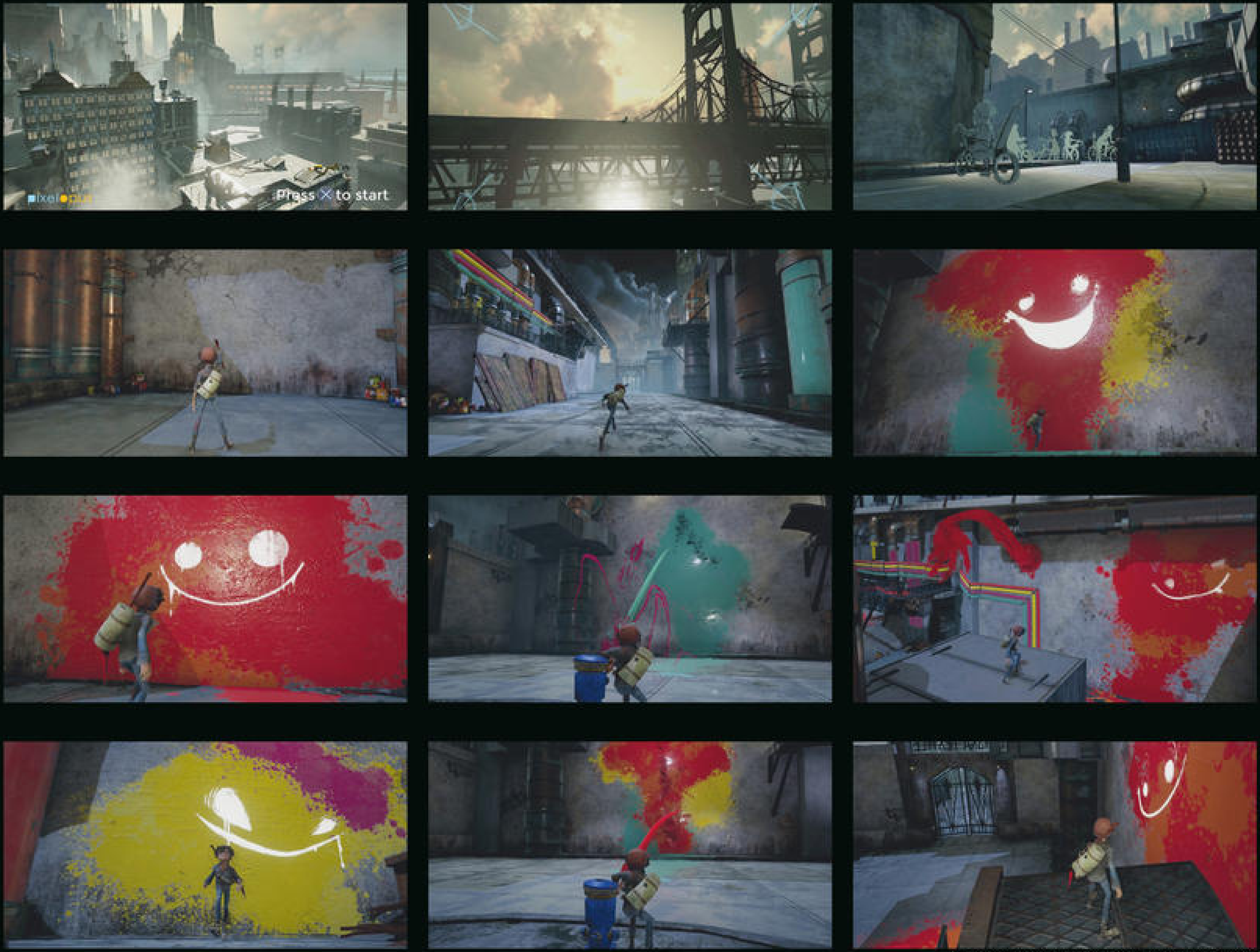




EARLY PROTOTYPES

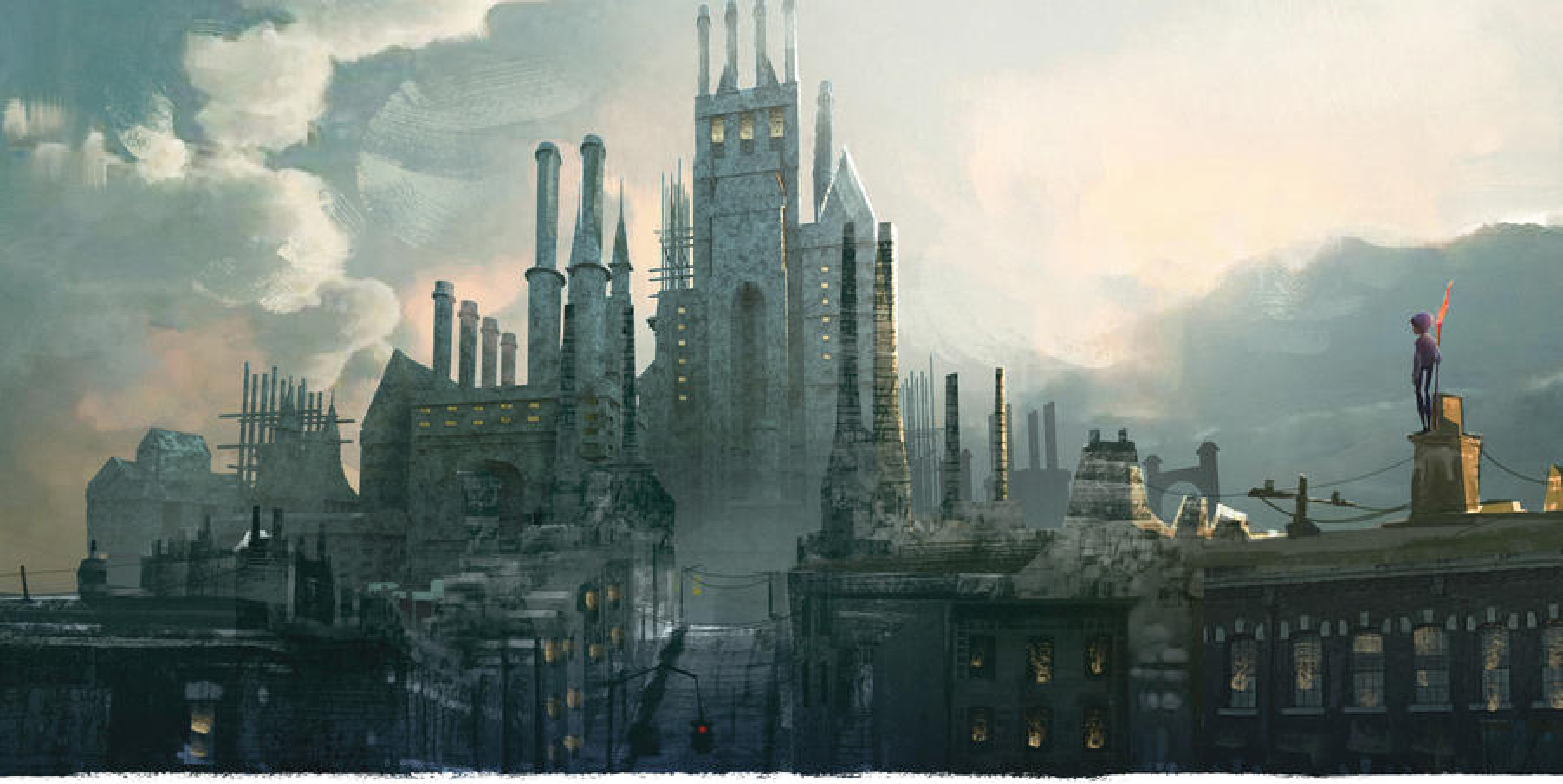
These were the early concepts for *Concrete Genie* where the story revolved around a young boy who would use his art to create friends that would help him tackle the bullies that harassed him. Even though we went through several iterations on the art style, the core of the story always remained focused on bullying and how art helps dealing with it.

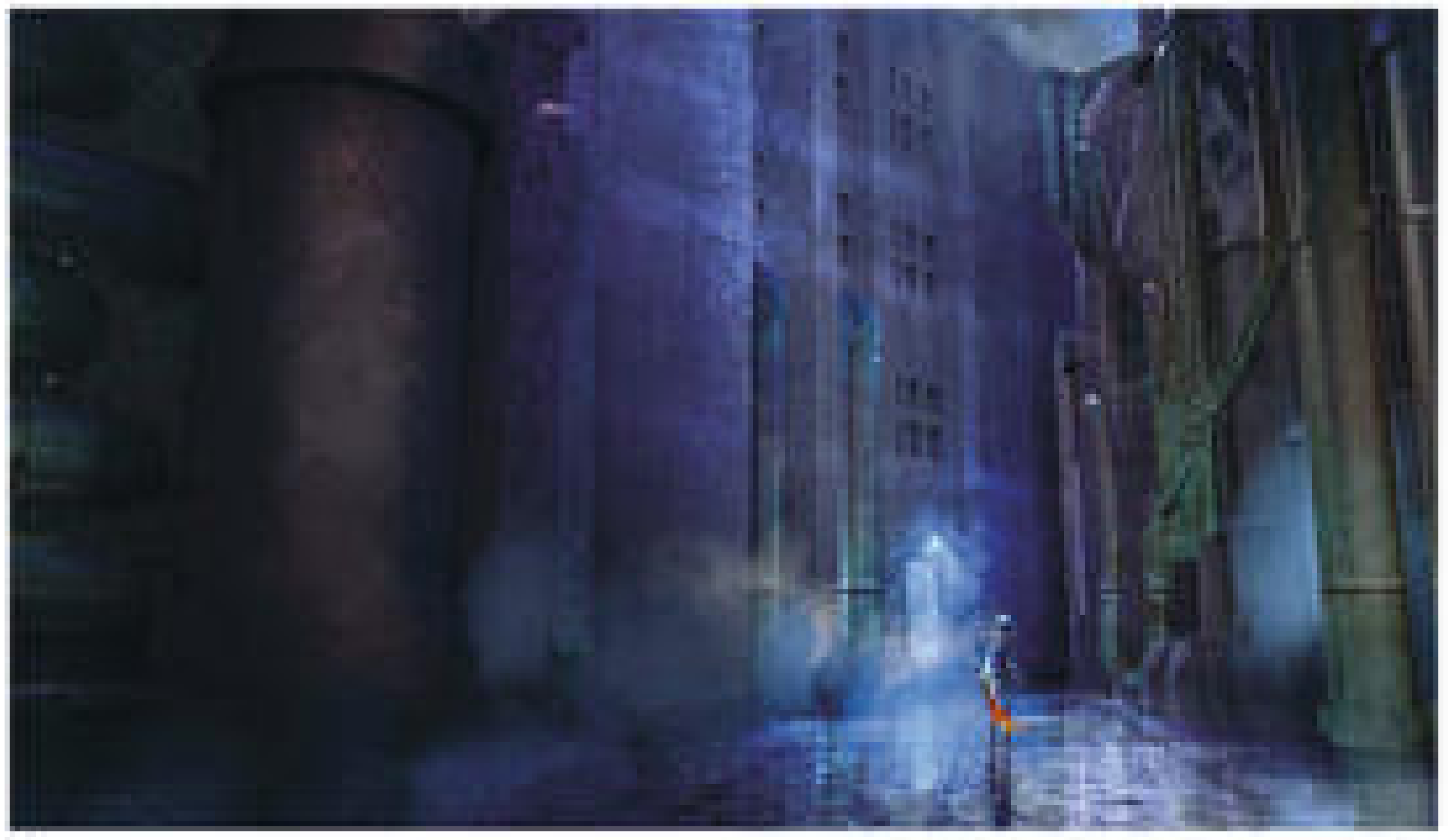
ARTIST ASHWIN KUMAR (THIS PAGE AND FACING PAGE)

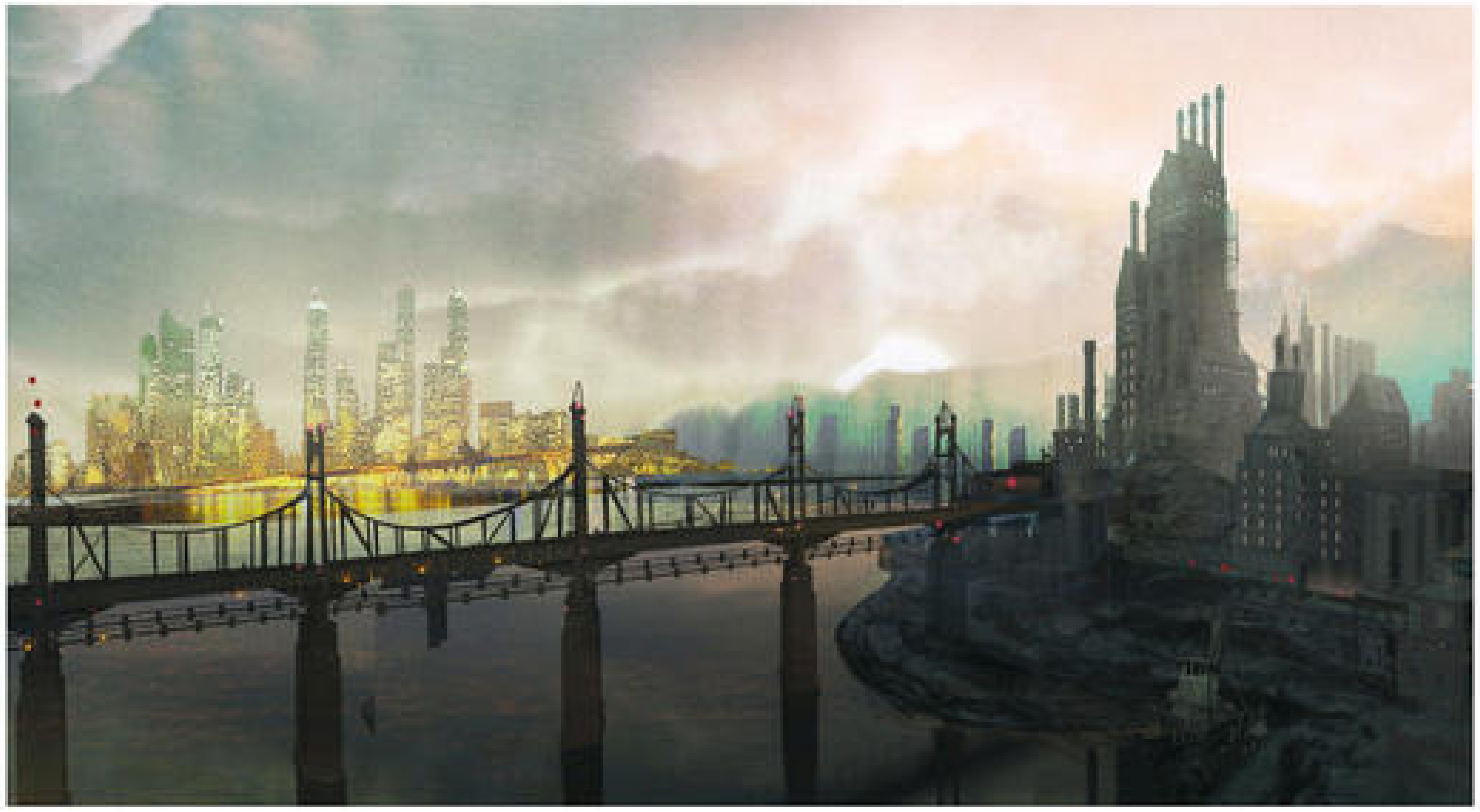


ARTISTS HAEWON NAM (PROTOTYPE LEVEL), DANIEL WILKES (MODELS)

In our early prototypes, you could chuck paint with motion control to form the body of your Genie, and the Genie would wake up with a hand-animated face on top of the paint splatters. But they didn't have arms or legs, nor the ability to move around. Even though we had a lot of fun chucking paint using DUALSHOCK 4 controller's motion control, it was hard to feel a deep connection with these abstract and static characters. So we decided to prototype more "precise" painting controls by giving players a painting cursor and more specific designs to paint, like butterflies. We also gave the Genies textured bodies, horns, tails, and the ability to follow Ash around, which made them way more lovable than before and truly feel like Ash's imaginary friends.



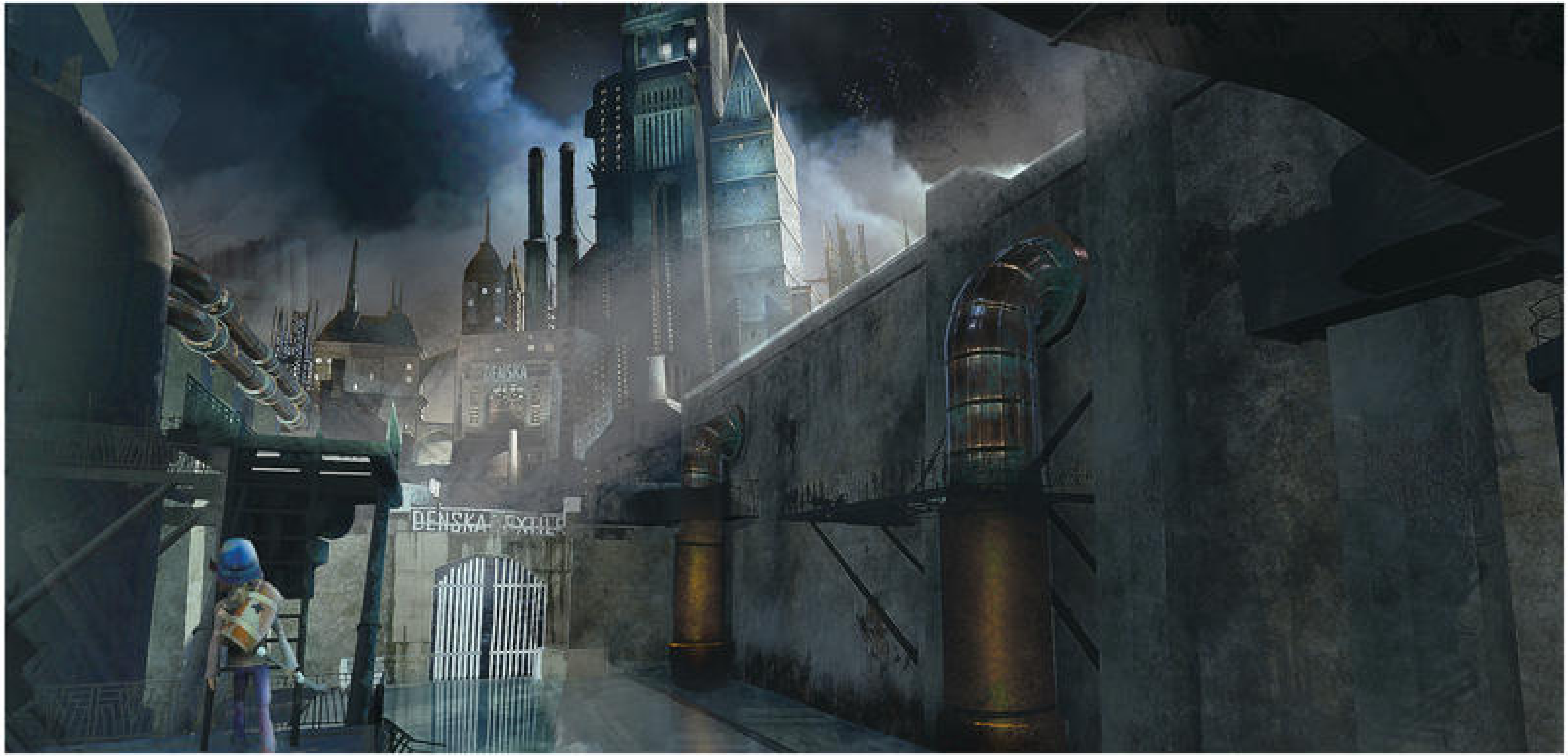


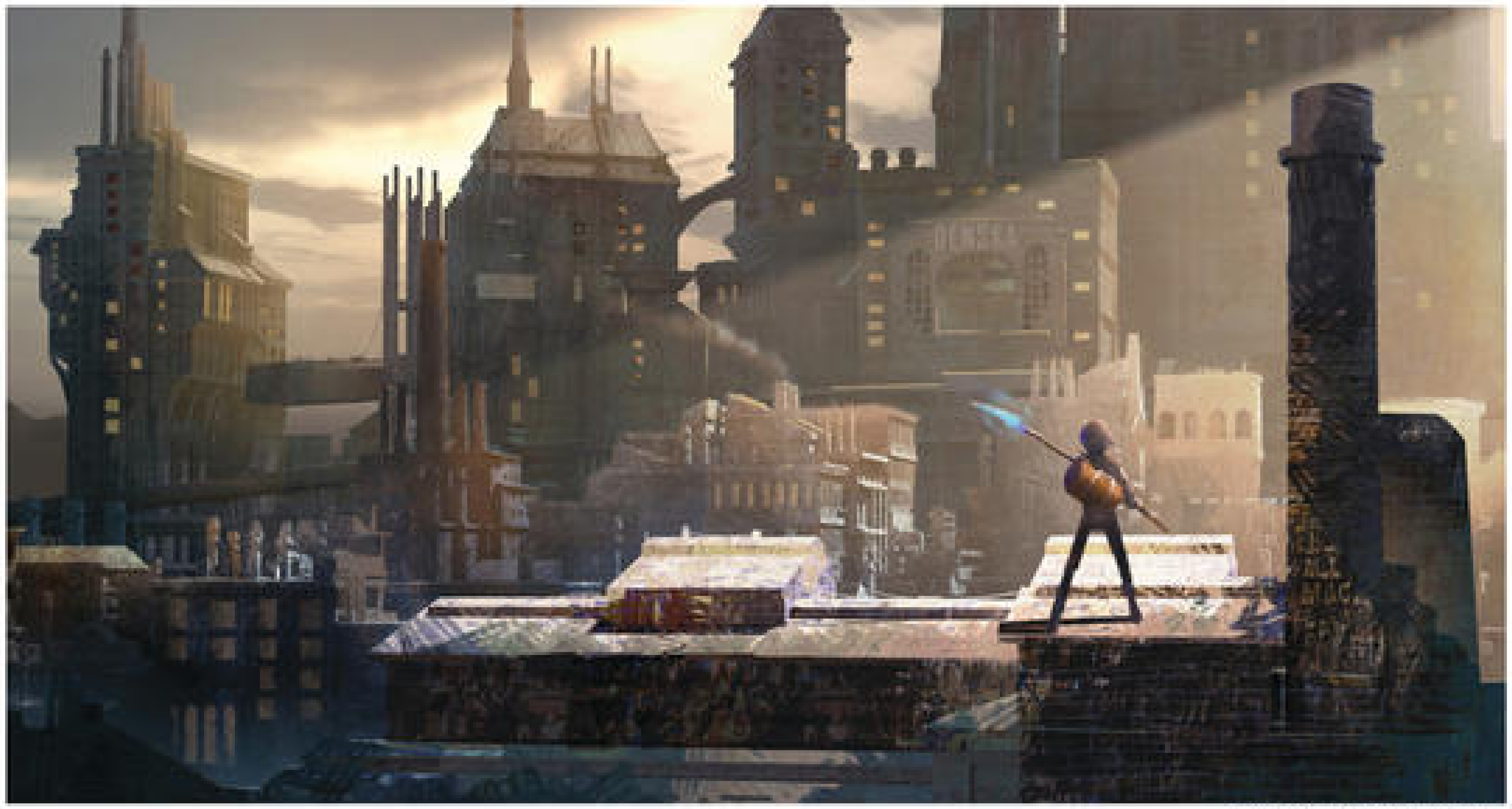


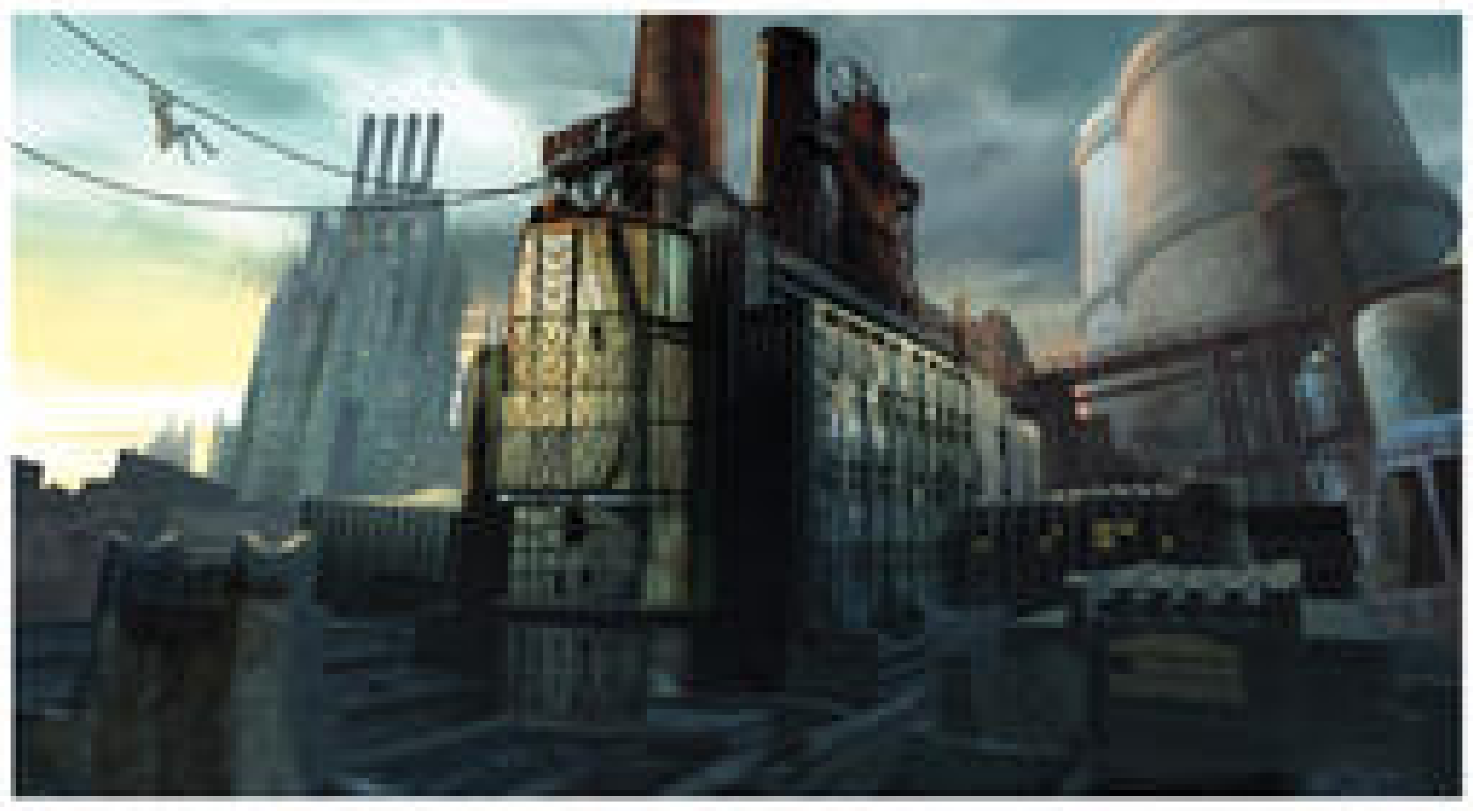
OLD DENSKA

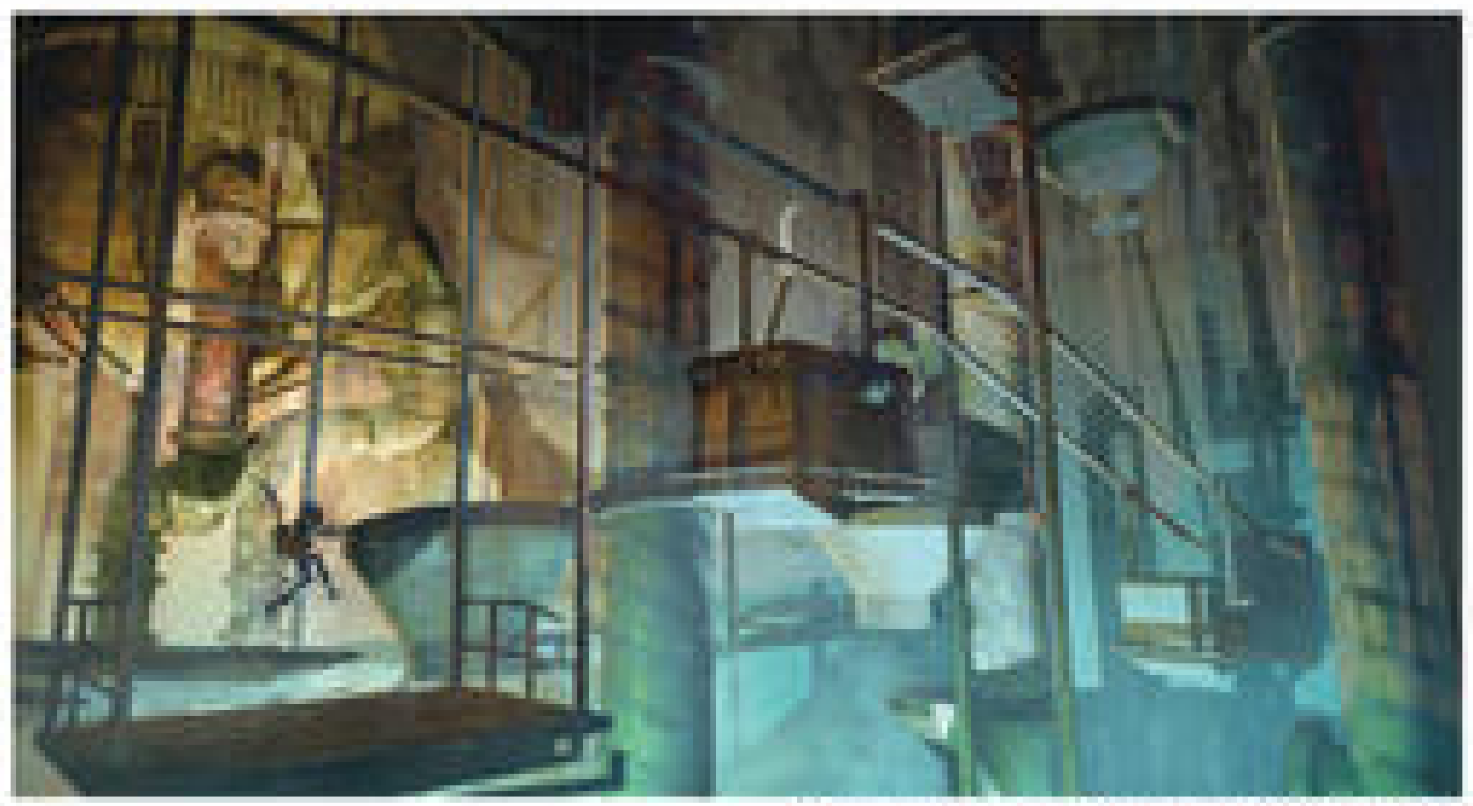
Our original concepts for Denska were much larger, darker, and ominous: a grand industrial complex that was once powered by a mysterious magical paint.

ARTIST JEFF SANGALLI (THIS PAGE)





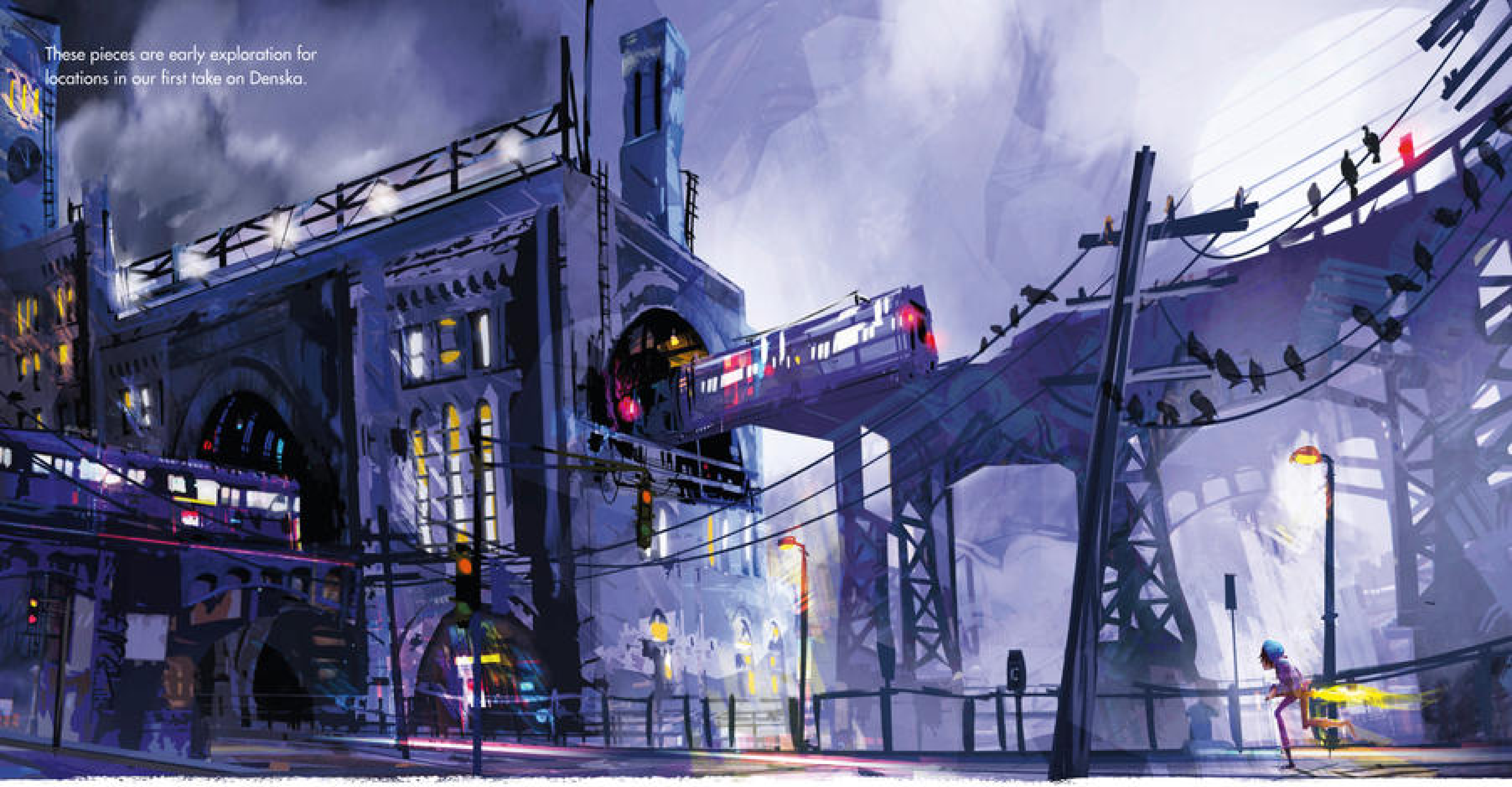




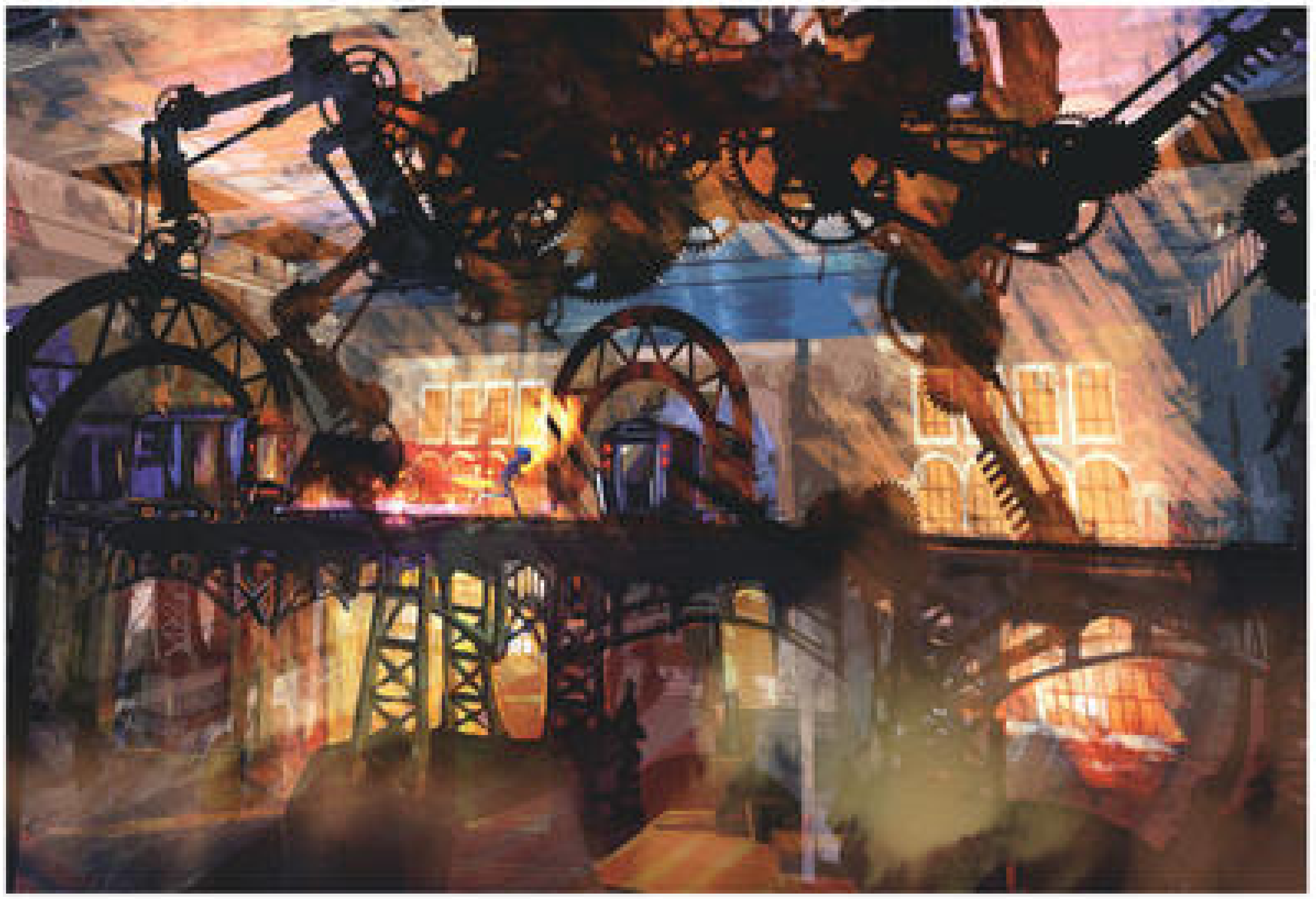
ARTIST JEFF SANGALLI (THIS PAGE)

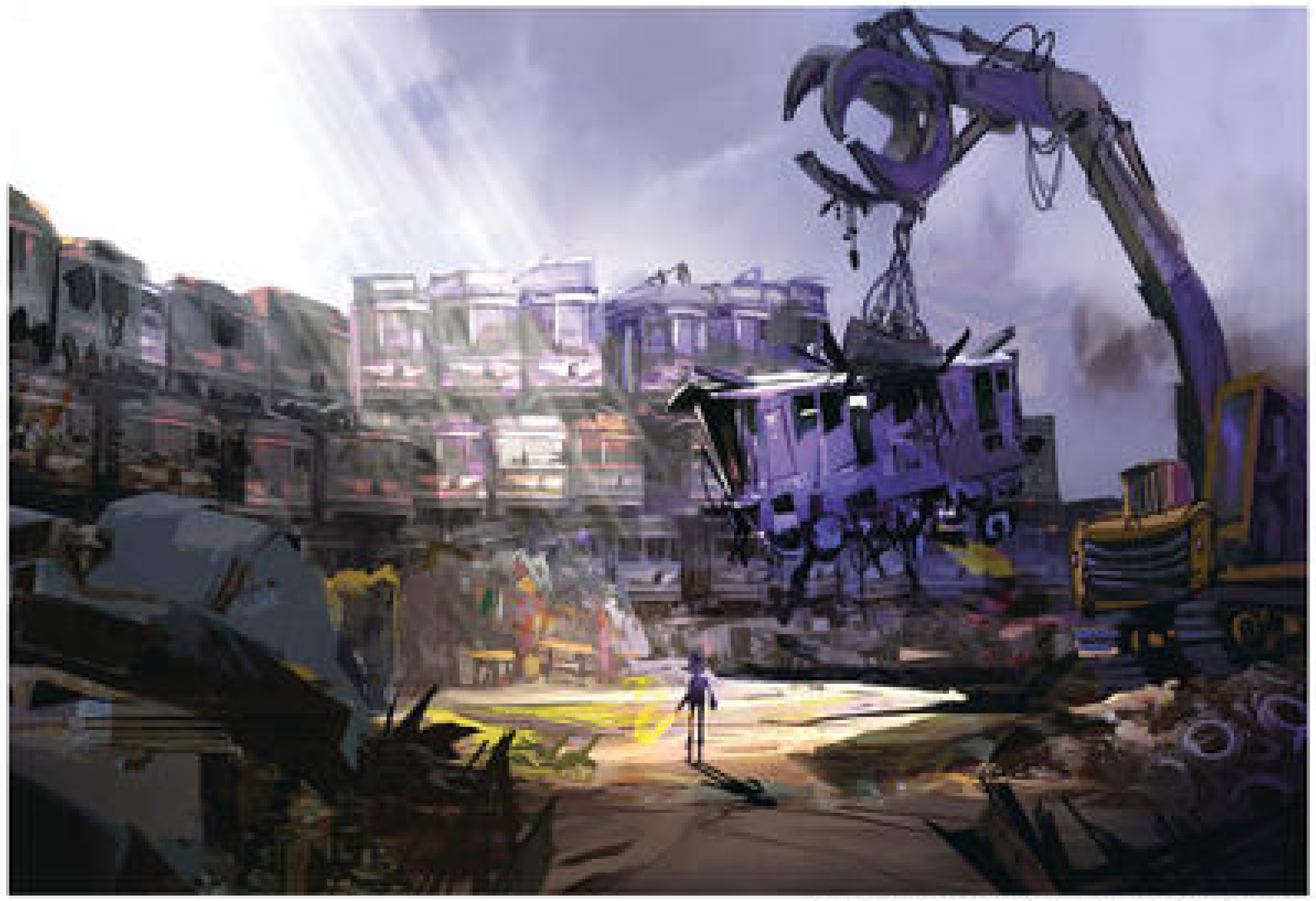
ARTIST TAYLOR LAMBERT (BOTTOM RIGHT)

Initially, Denska was envisioned as a much larger city, but we soon discovered that our story and creative gameplay would resonate better if we set it within a smaller-scale environment.

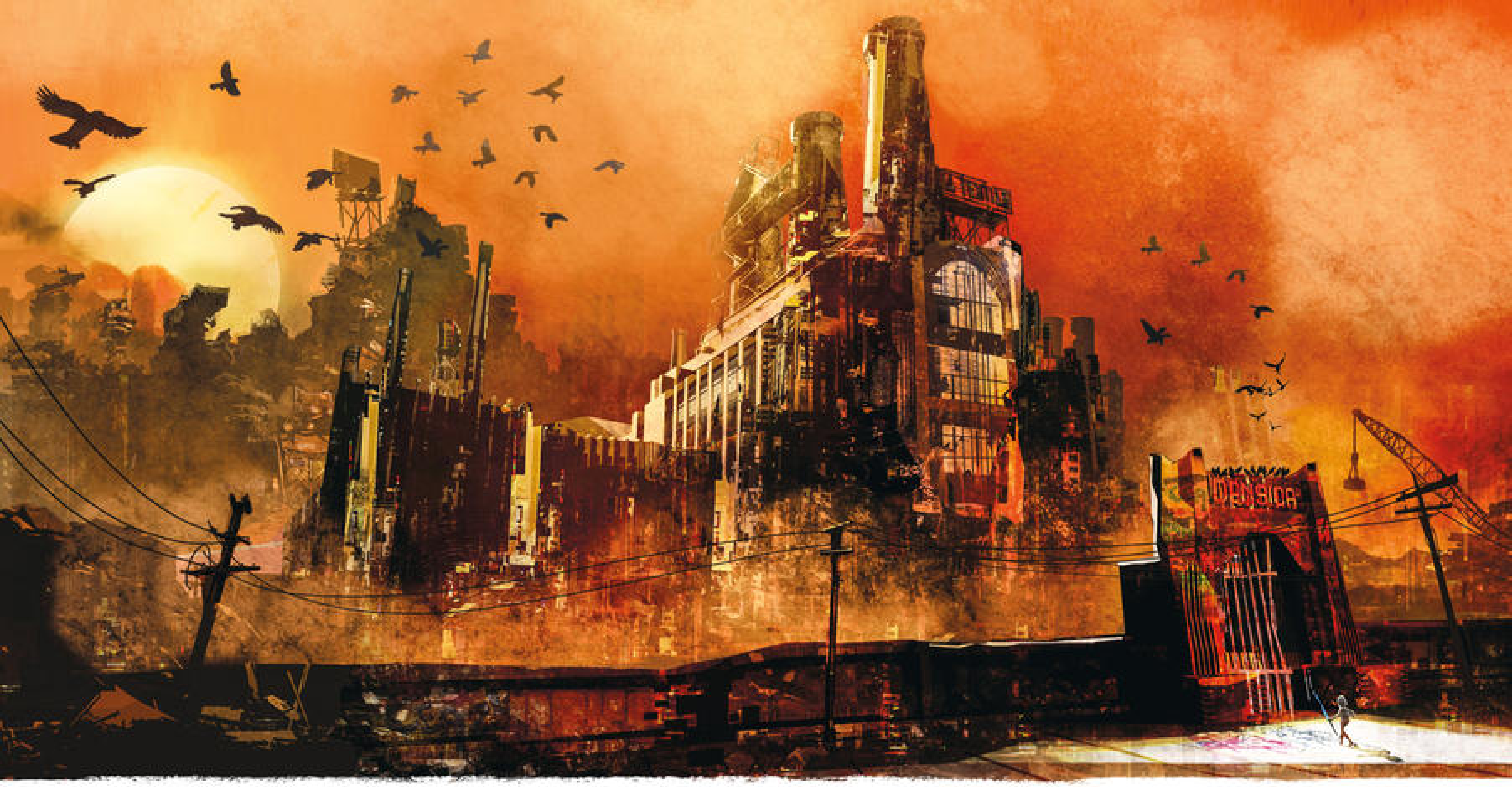


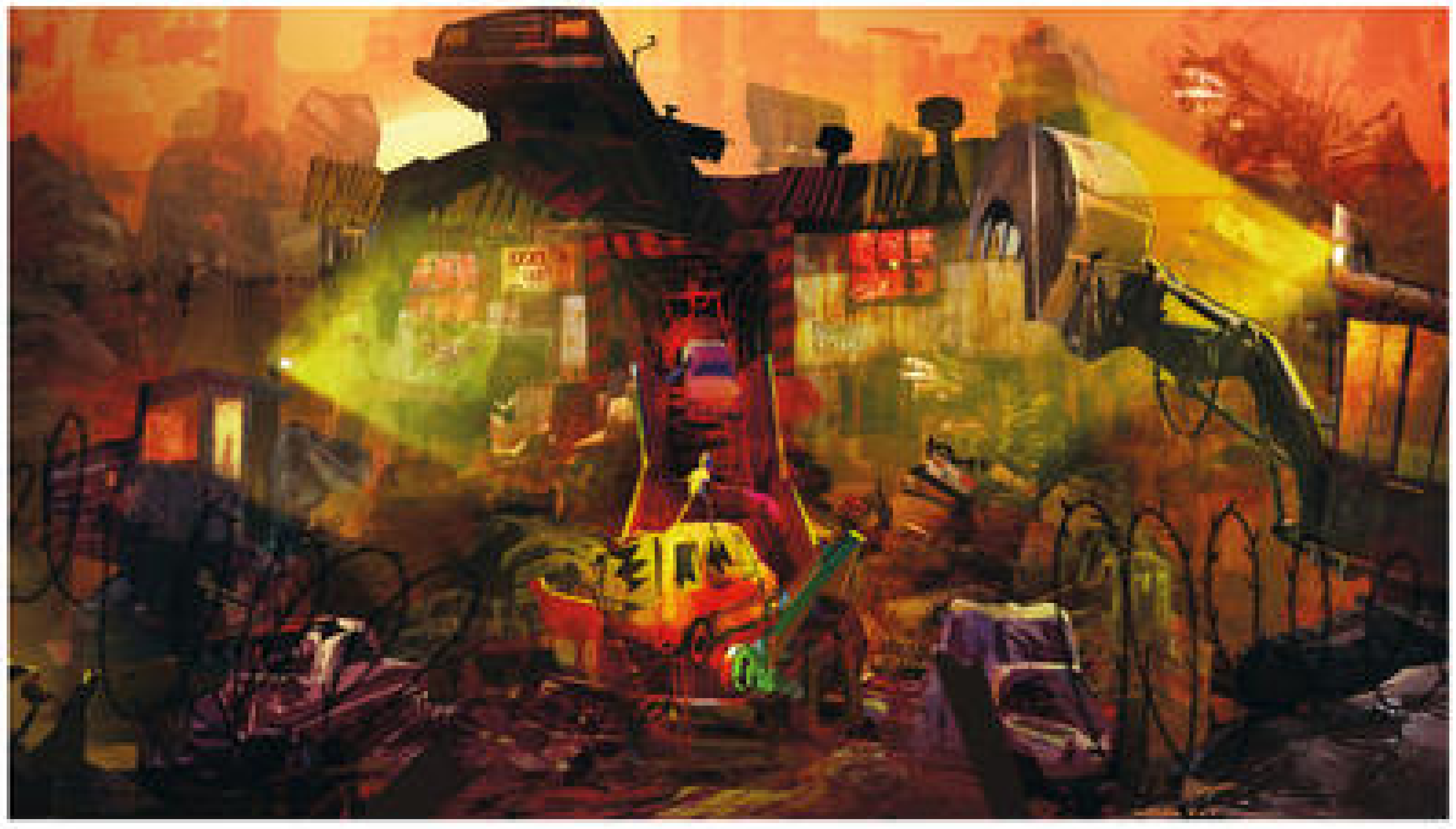
These pieces are early exploration for locations in our first take on Denska.

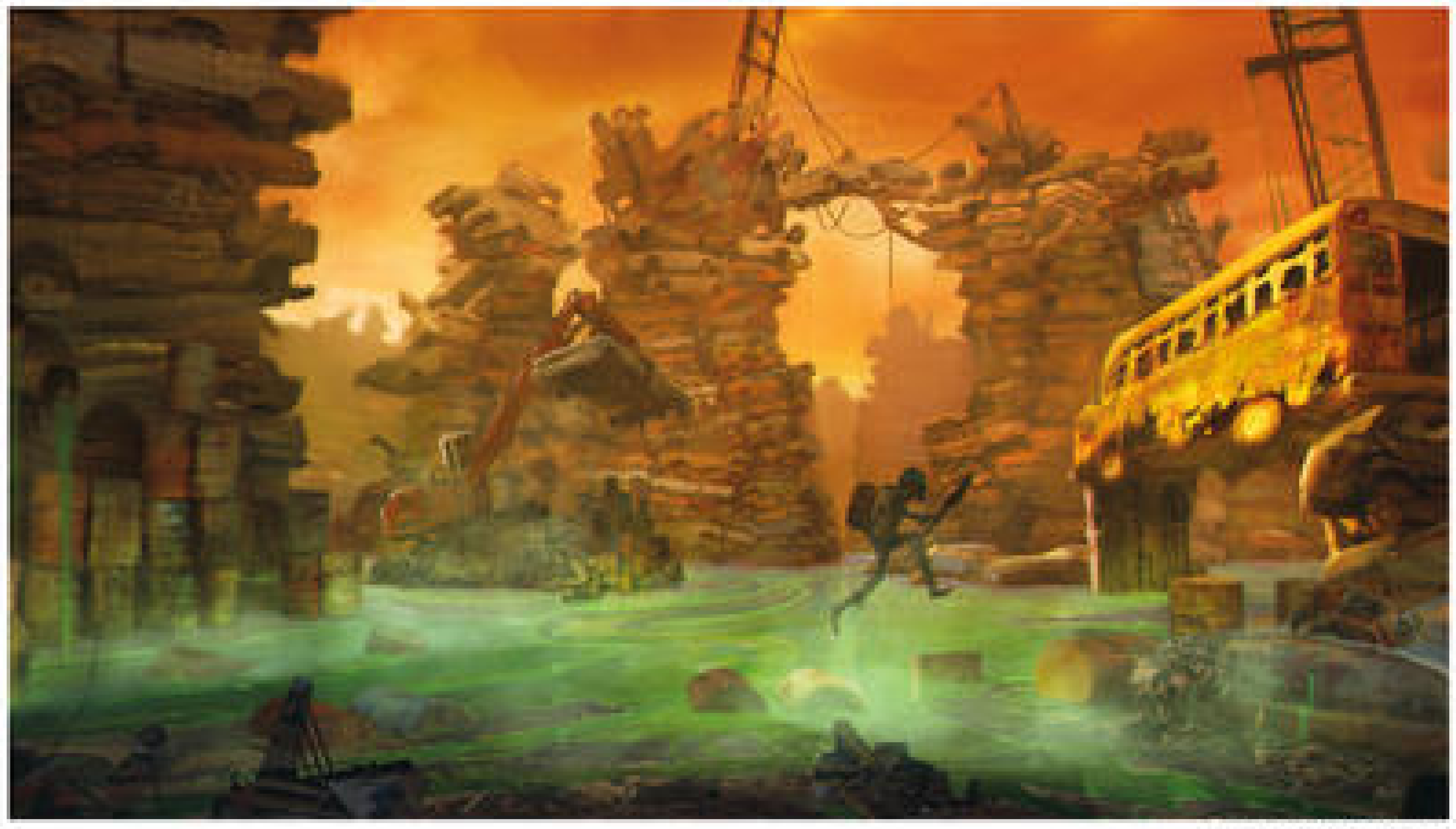




ARTIST JEFF SANGALLI (THIS PAGE AND FACING PAGE)







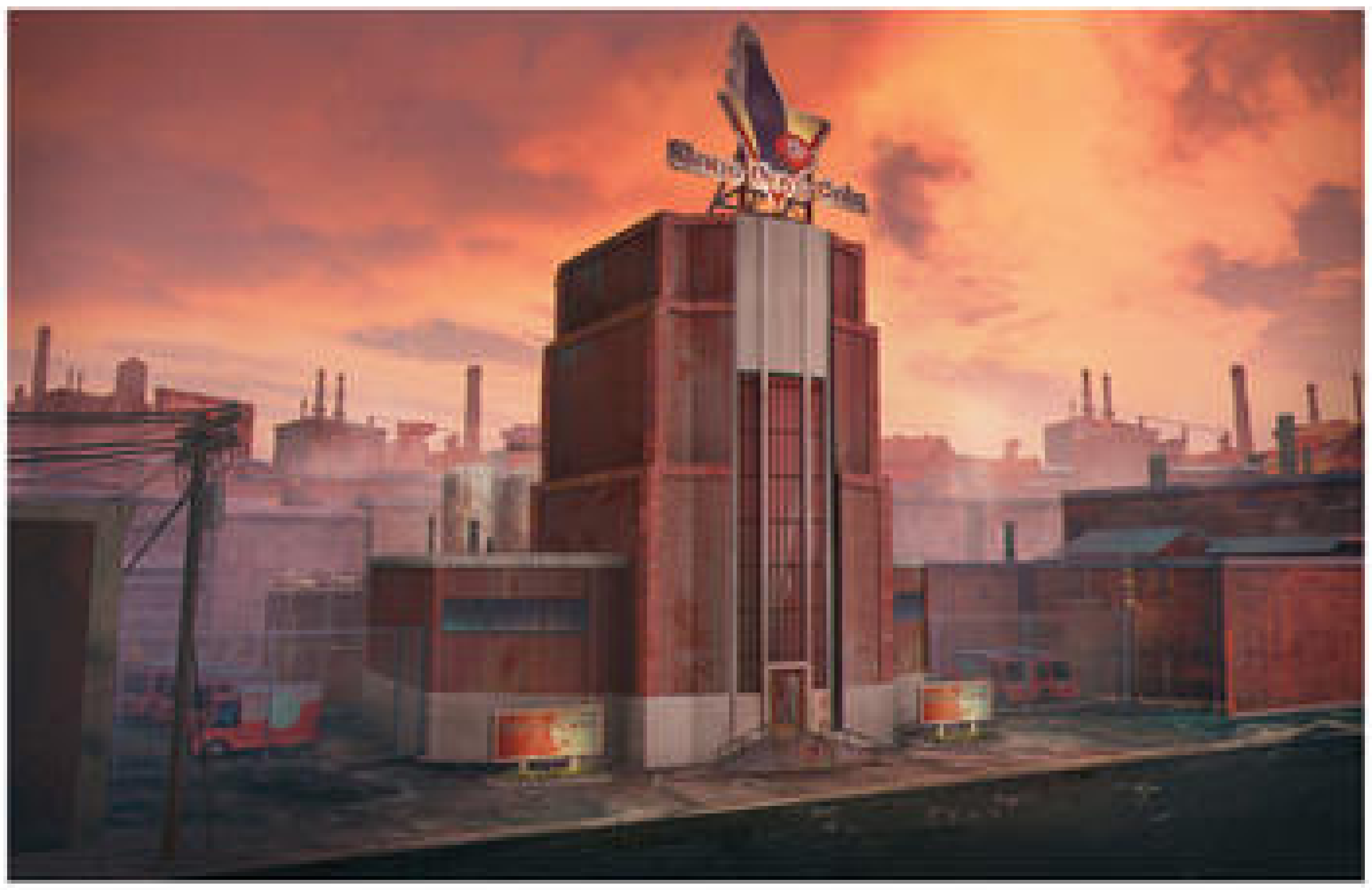
ARTIST TAYLOR LAMBERT

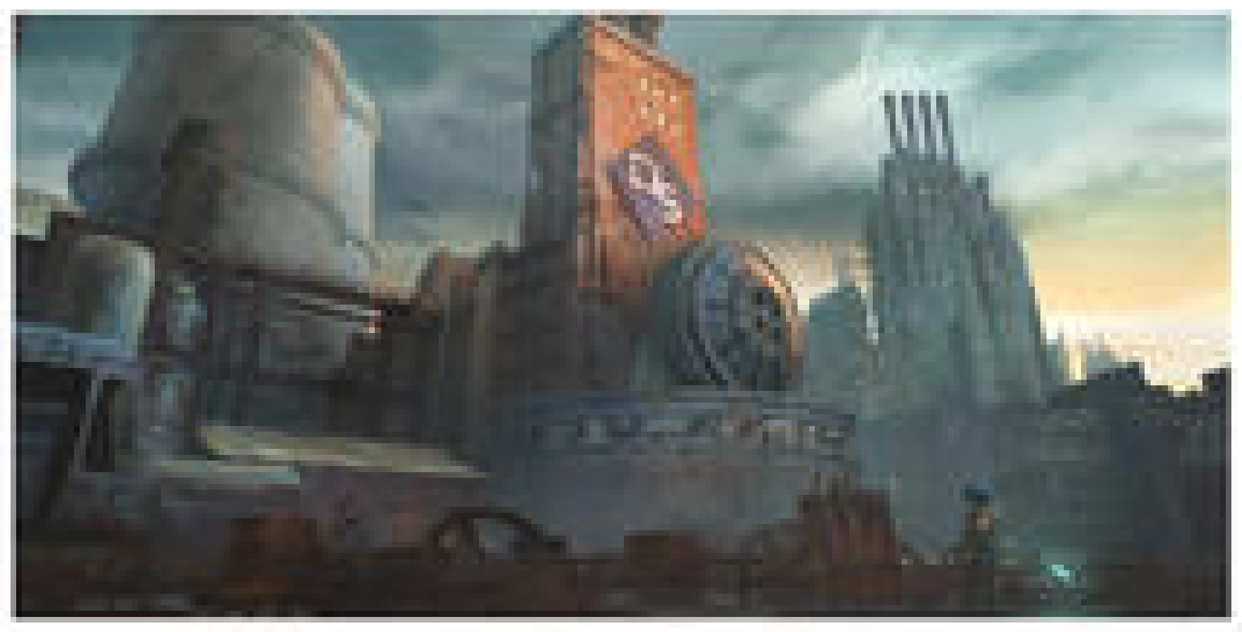
This scrapyard was one level prototype that made it quite far into pre-production but ultimately did not deliver enough painting canvases for the player, due to its uneven wall spaces. At this point in the development, you also were not able to paint on any wall, just a handful of ones that we would mark in the level design.

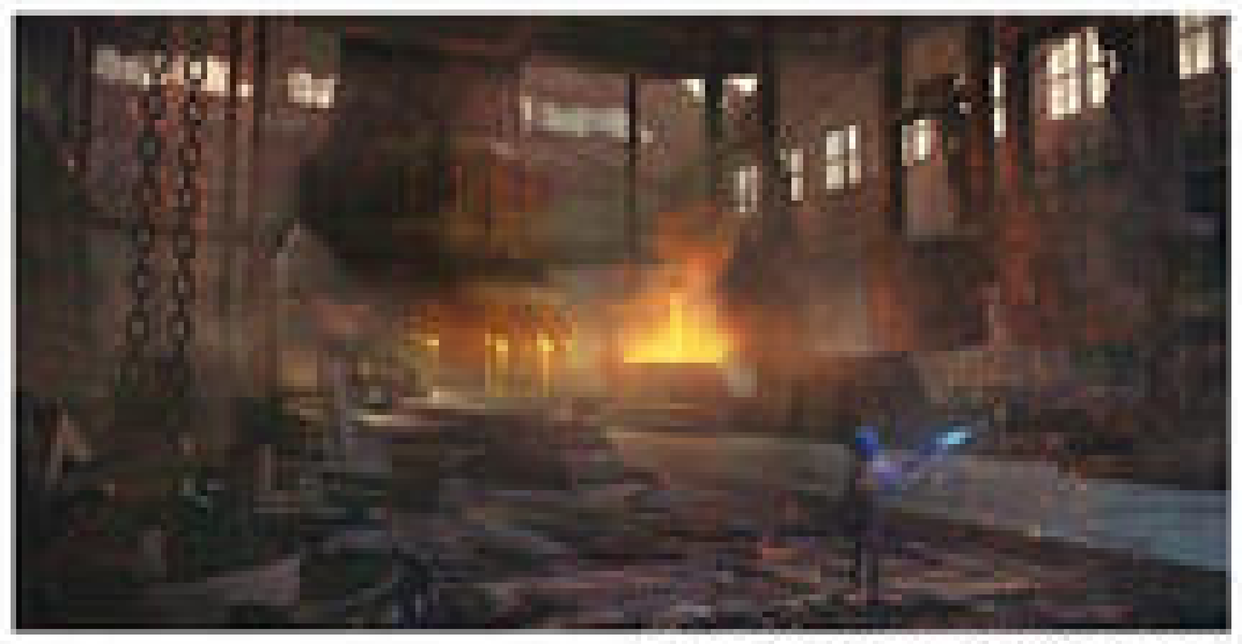
OTHER AREAS

This clock tower was another early location that was designed around platforming prototypes and was conceived as a hub-like location. It was left behind when we began our second iteration on the world design.

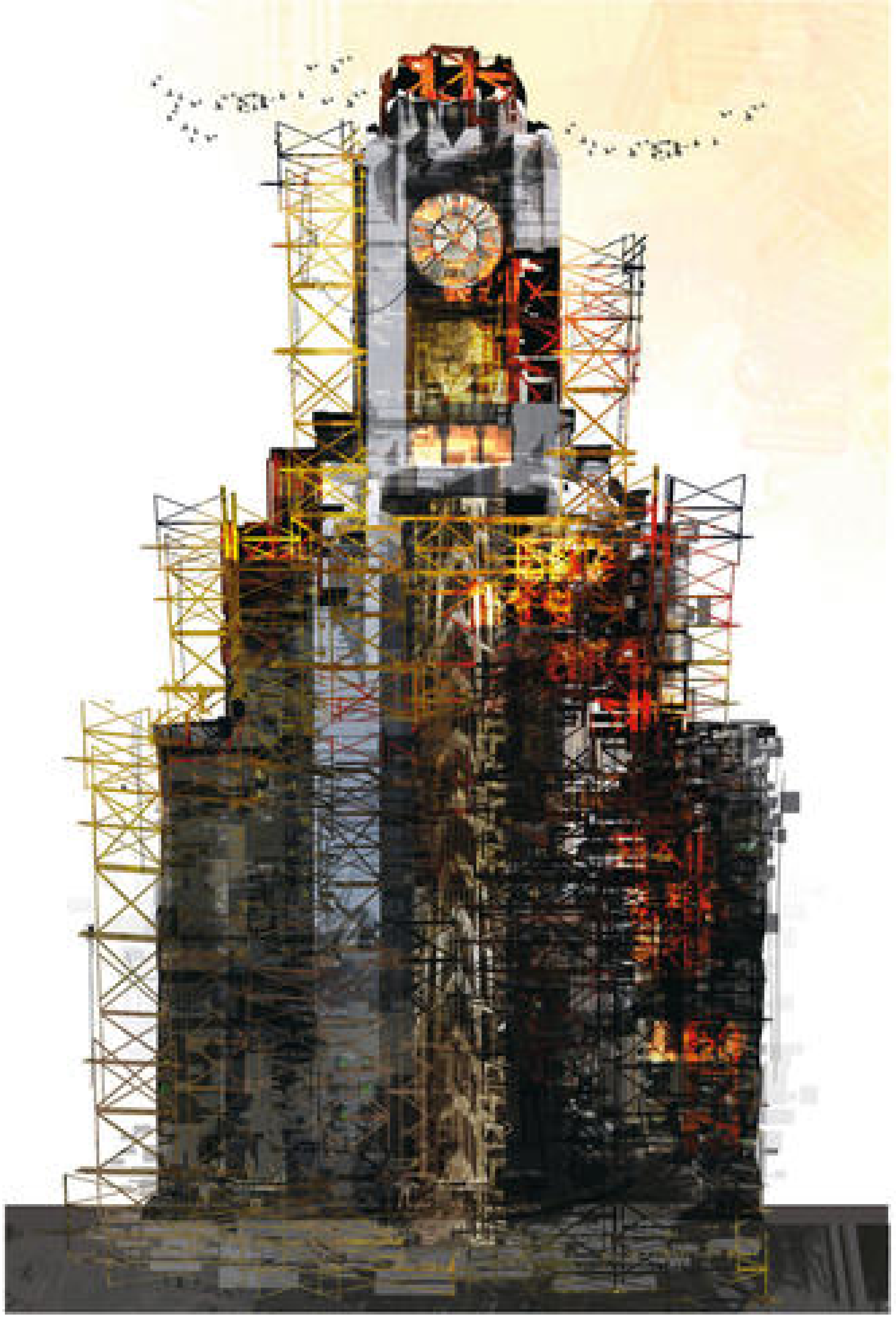
At one point we explored the idea that paint actually ran underneath the streets of Denska, and paint was actually piped around the city for people to use. These huge glass pipes were there to be filled and activated by the player. At this point in the game design, paint was a measured resource and had to be carefully managed by the player.

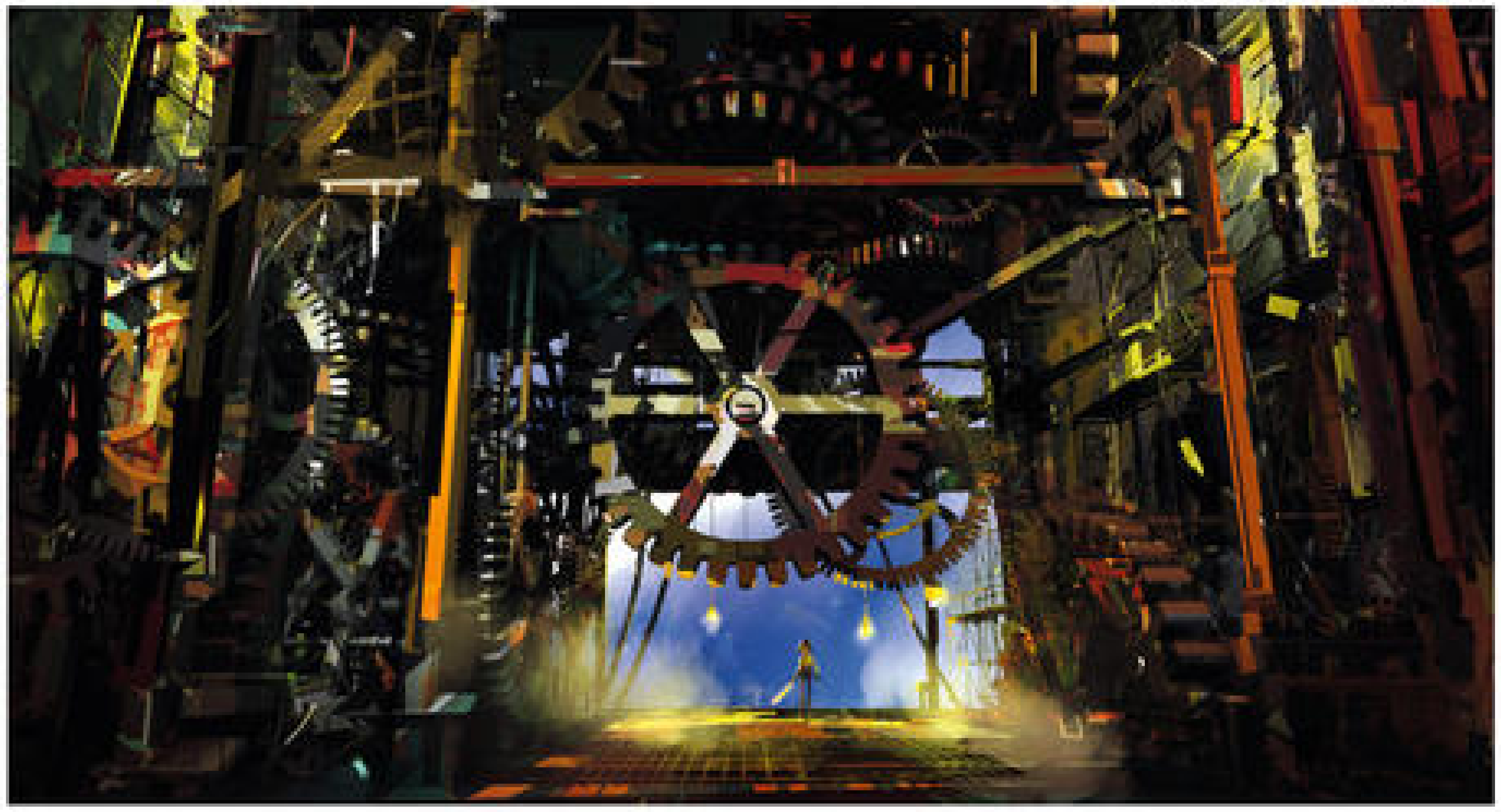


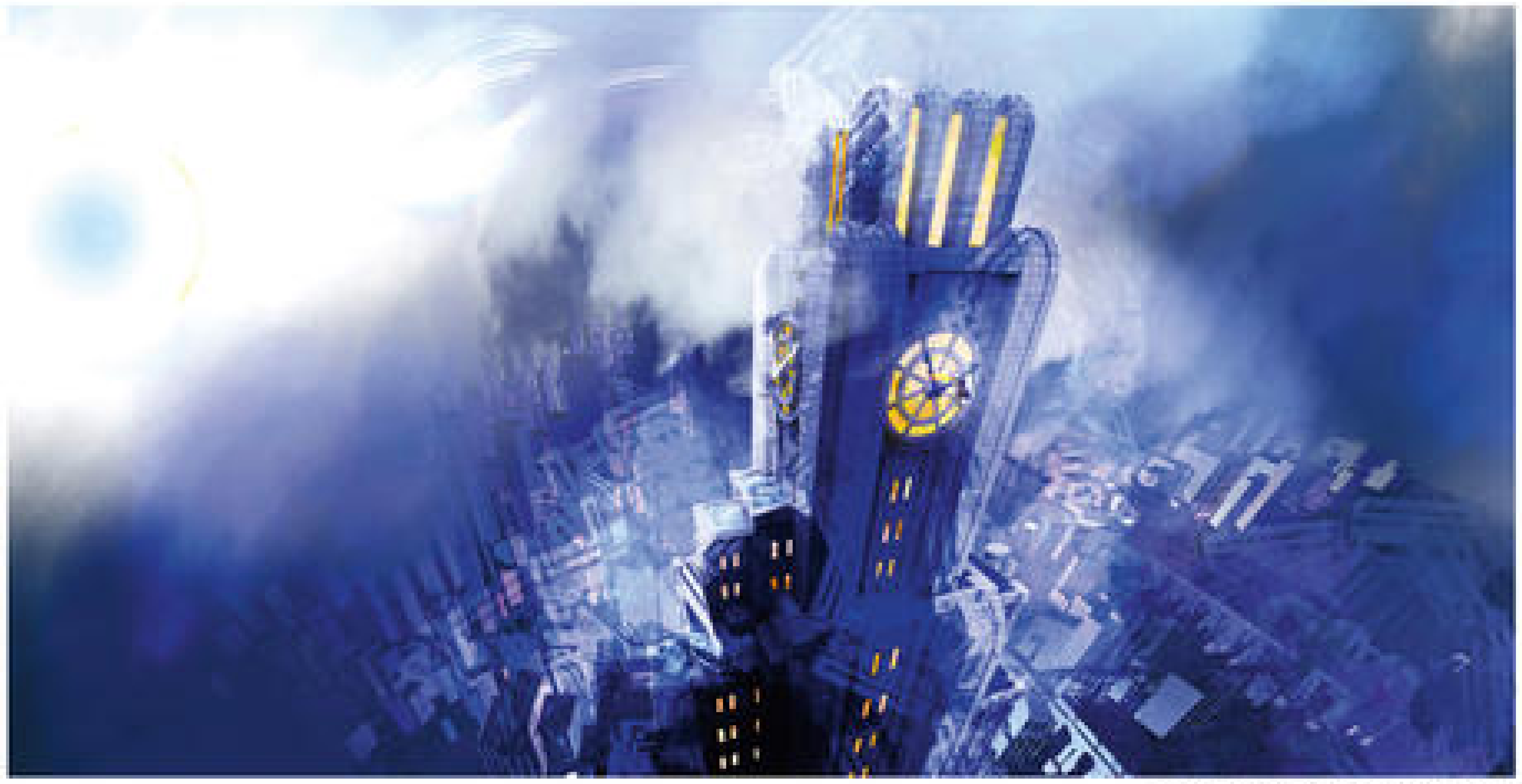




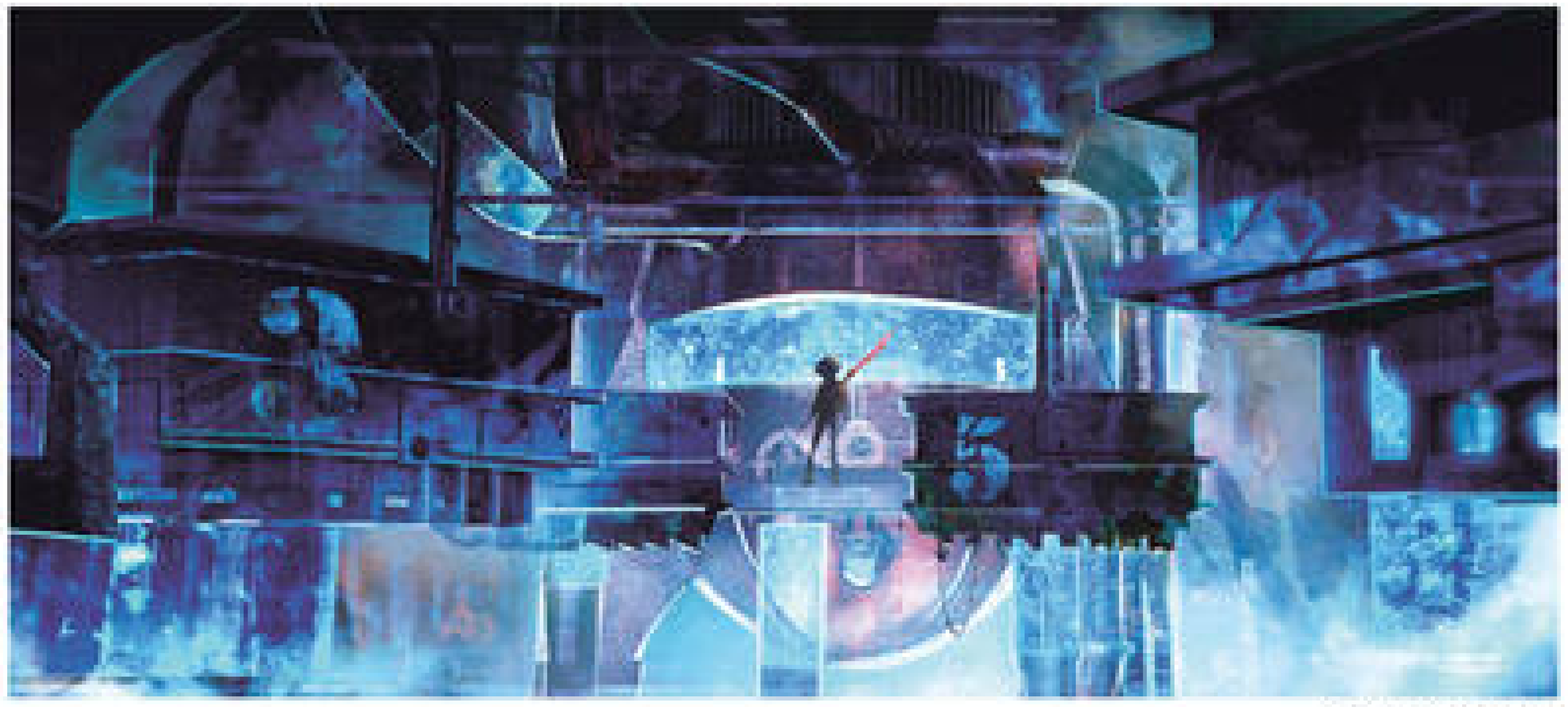
ARTIST TAYLOR LAMBERT (TOP THREE)



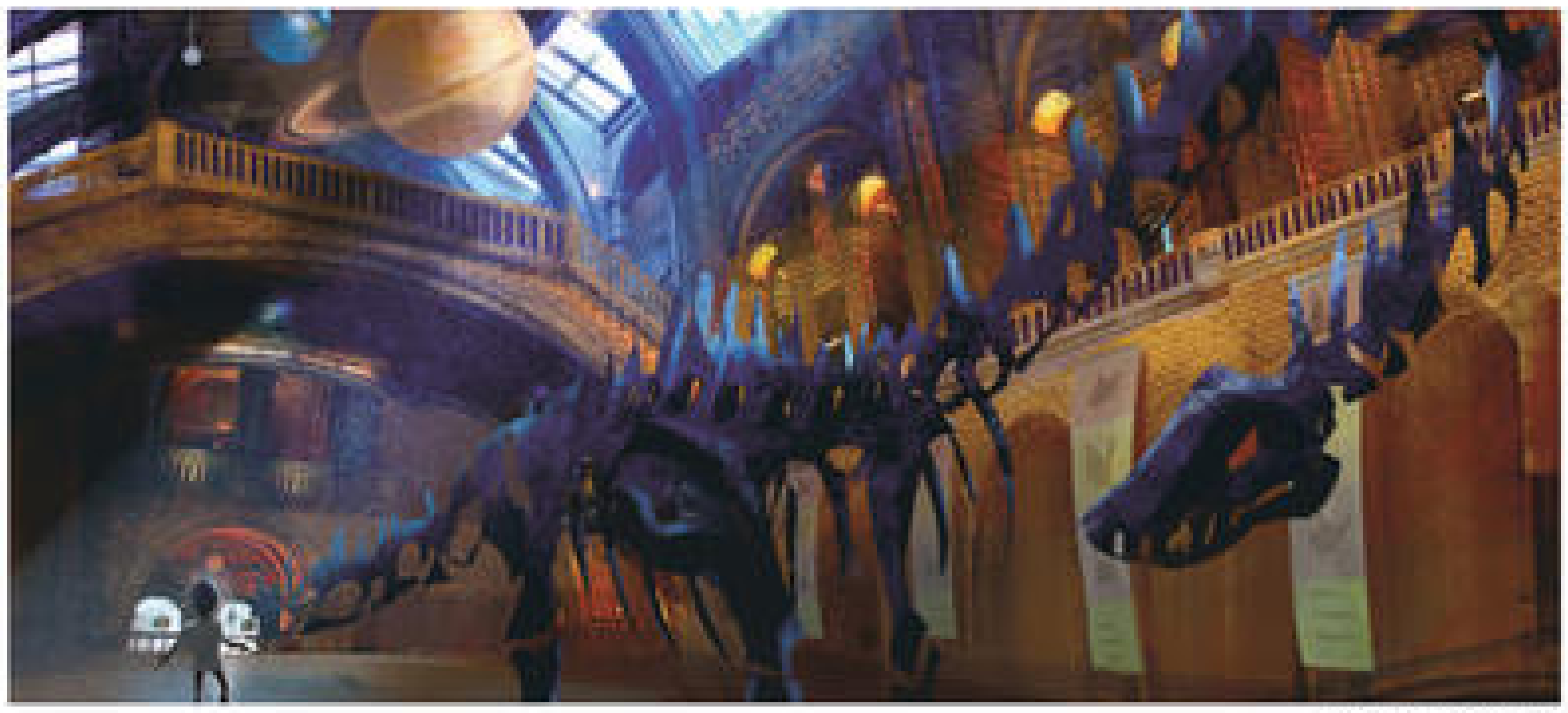




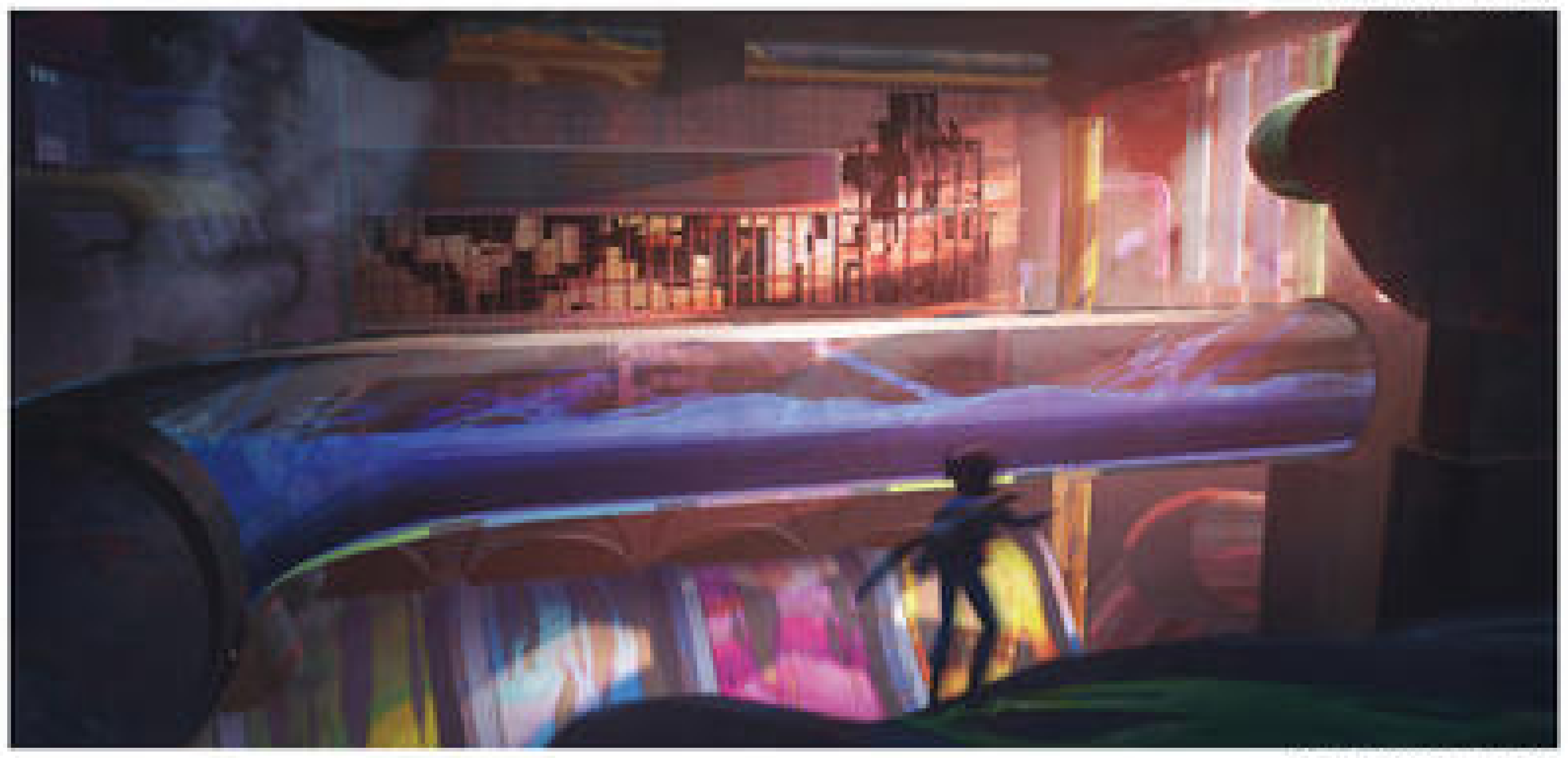
ARTIST JEFF SANGALLI (BOTTOM THREE)



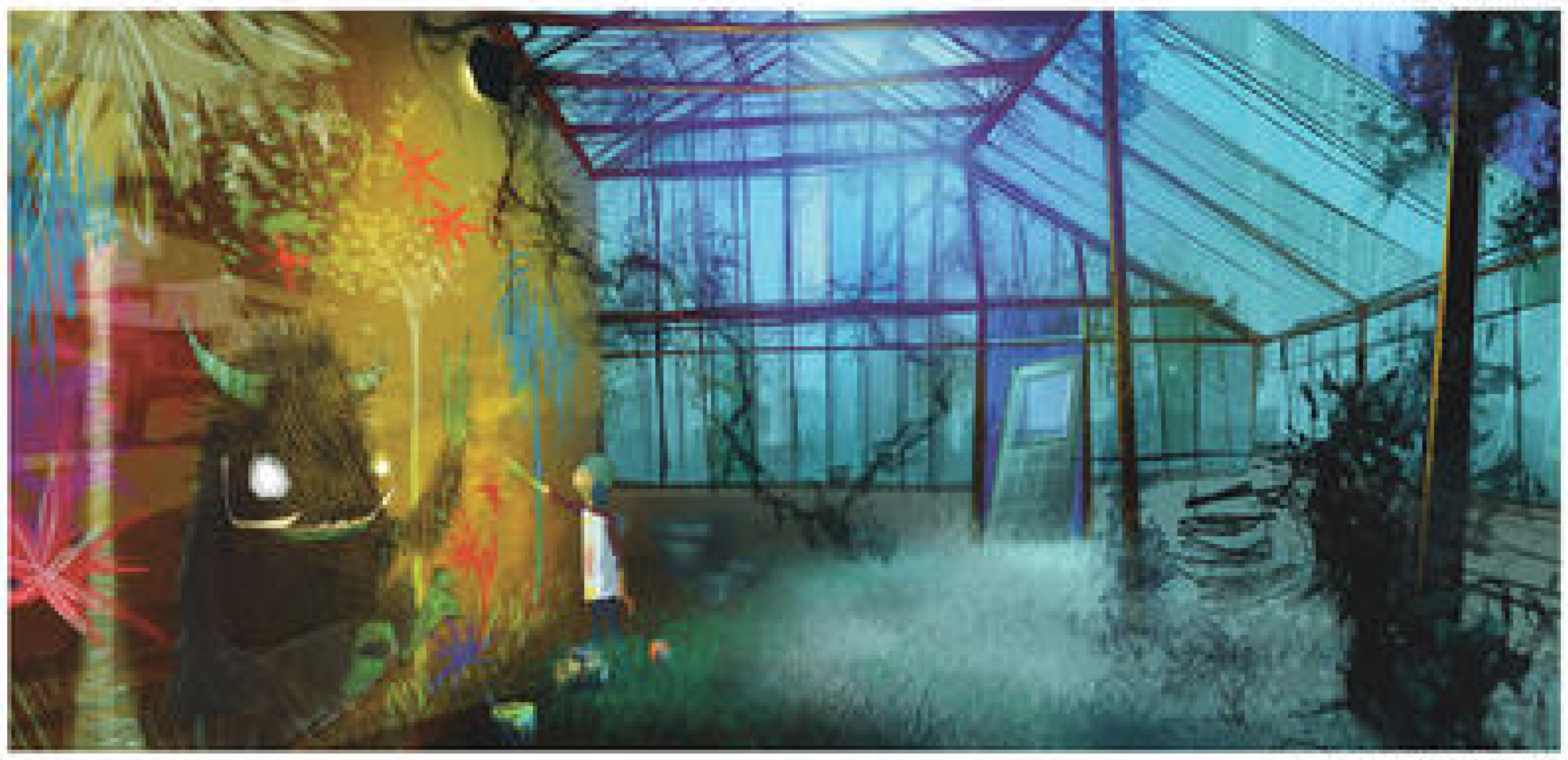
ARTIST *JEFF SANGALLI*



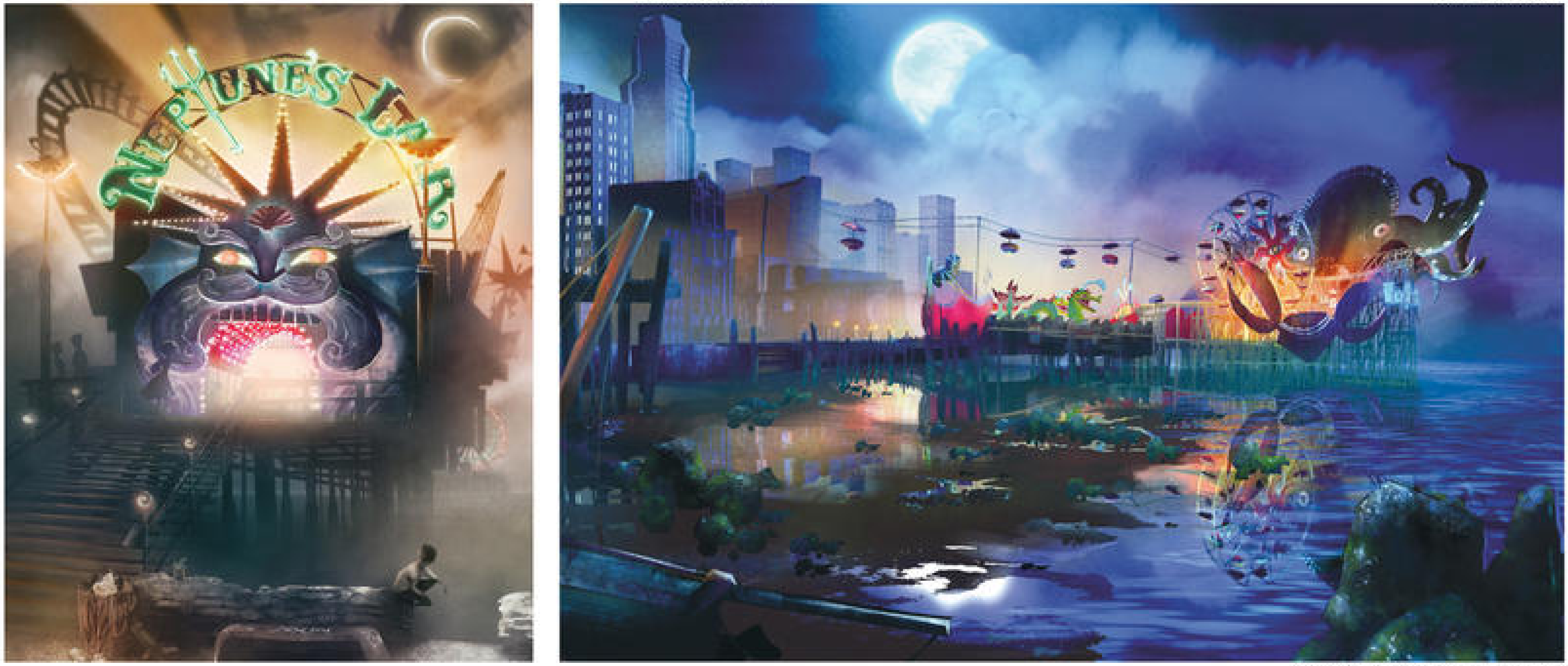
ARTIST *HAEWON NAM*



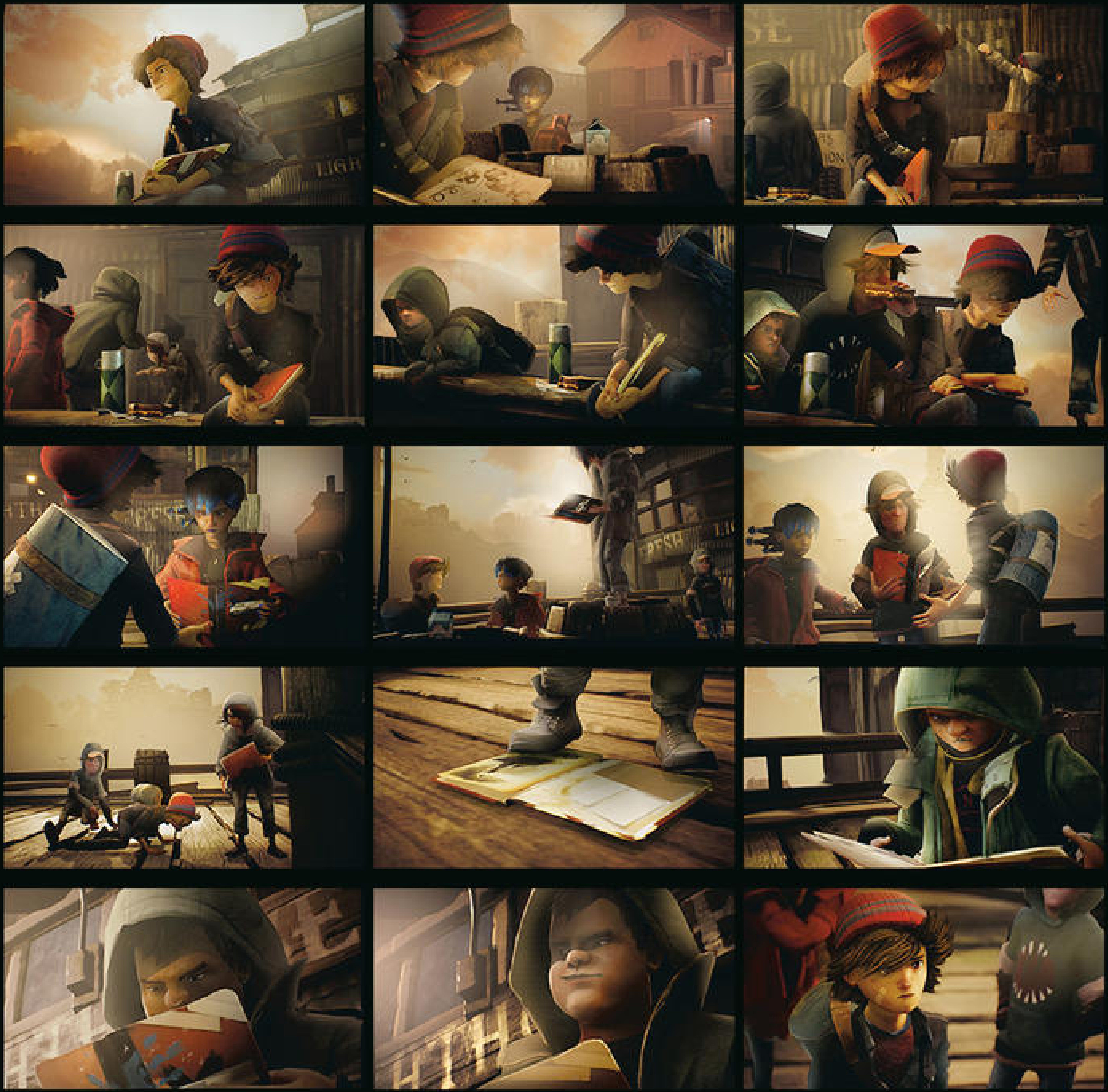
ARTIST *TAYLOR LAMBERT*



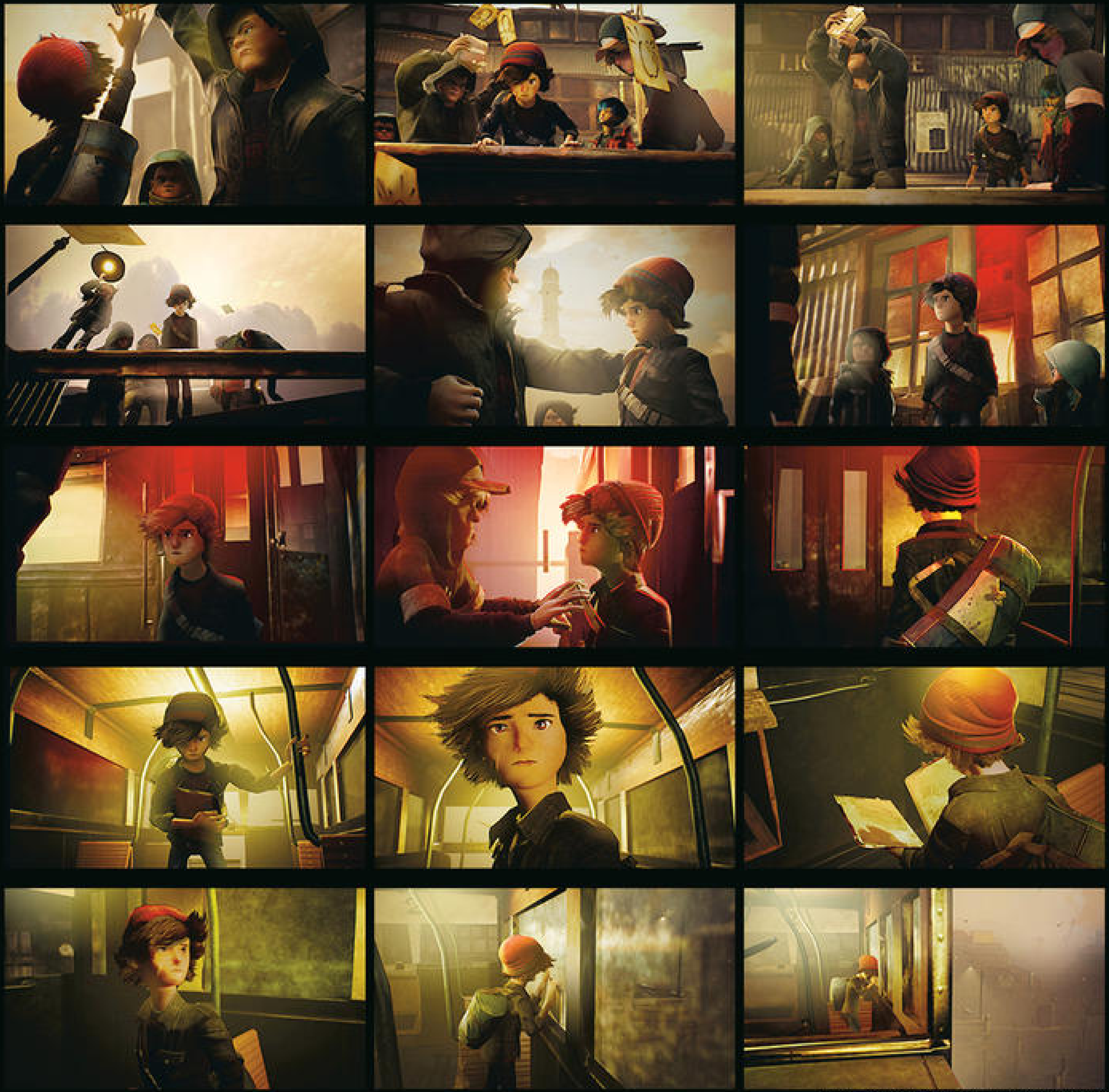
ARTIST *BECKY ROBERTS*



ARTIST *BECKY ROBERTS (LEFT AND RIGHT BOTTOM)*

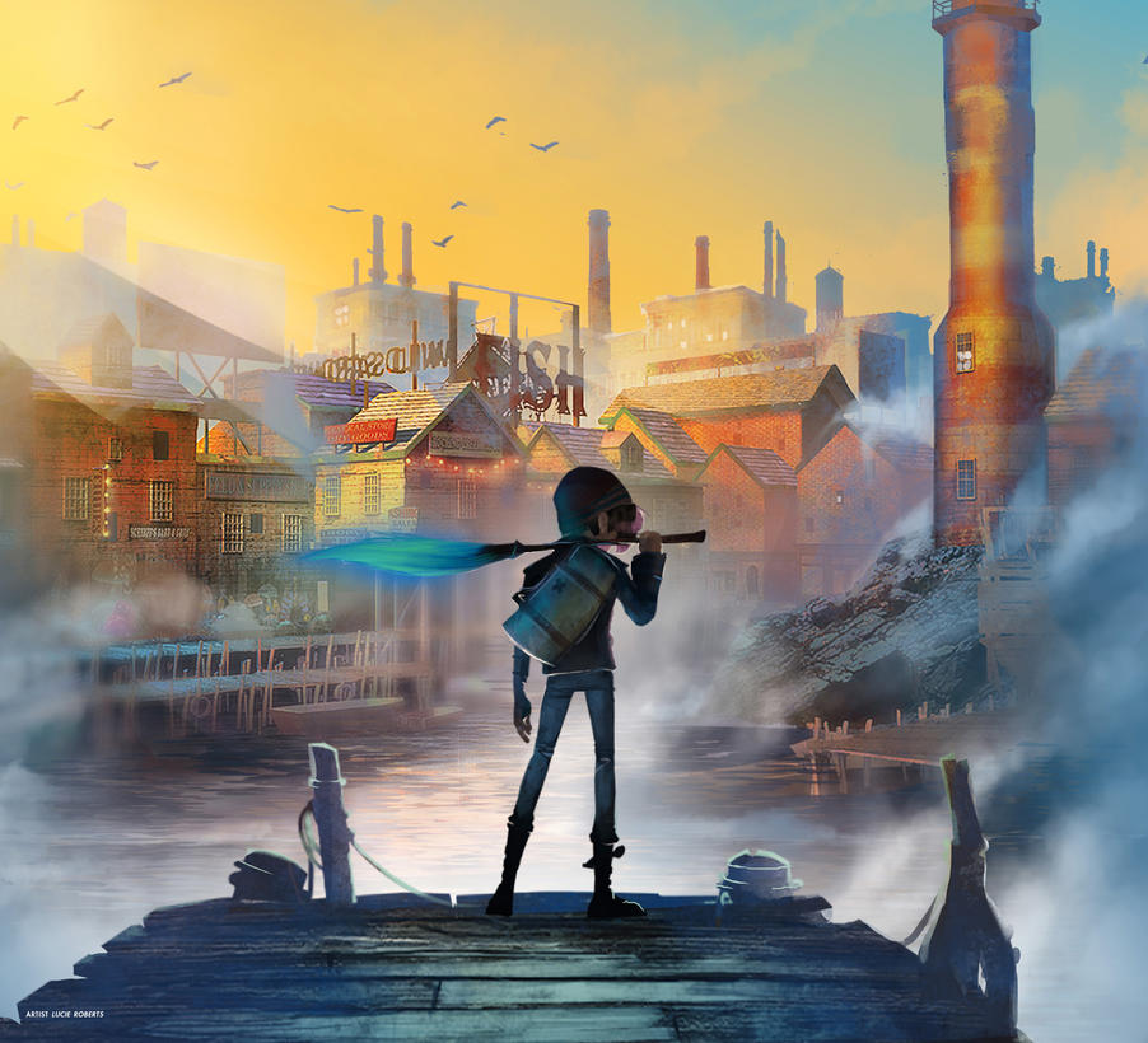


This is an example of a lighting key that describes how to carefully light a story scene in a dramatic way that underlines story and character interactions with sympathetic lighting.

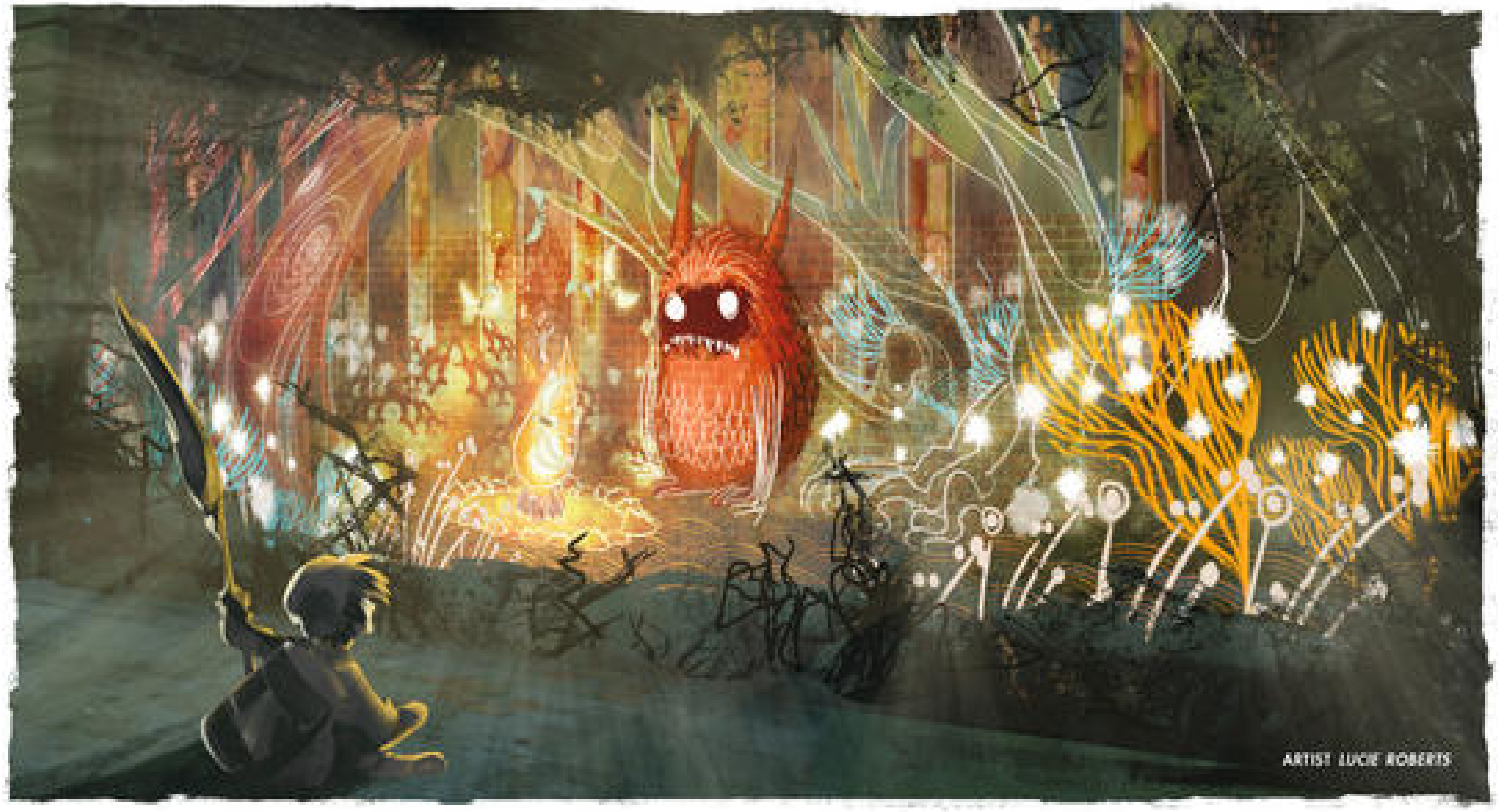


ARTISTS BECKY AND LUCIE ROBERTS, JEFF SANGALLI (LIGHTING)

These were completed for every cutscene in the game, and once Jeff had completed them they would be handed off to Becky and Lucie, or Bob Archibald, for implementation in the game.



ARTIST *LUCIE ROBERTS*



AFTERWORD BY

CONNIE BOOTH

I'll never forget the first time I saw the Living paint in *Concrete Genie*. By that point, the game had been in development for some time, and the story of Ash as an artist whose creations came to life and become his companions was well underway. But on that day, when Dom, Jeff, David, Becky, and Lucie showed us all that with a swipe of a paintbrush, a flurry of butterflies might come to life and fly onto the walls of Denska and into the screen, Pixelopus truly found the magic in *Concrete Genie*.

At its core, *Concrete Genie* is a game about imagination. But its universal themes around friendship and caring for the world around us reflect the passions of our team, who came together from around the world to form a development studio focused on innovation in the heart of our PlayStation headquarters campus in San Mateo, California.

Pixelopus is a unique team, formed of old friends and new members of the game industry, brought together by a shared vision for telling stories with heart.

Our dream is that players are able to experience, just for a moment, what it means to be an artist, working with magical, Living Paint and sharing new and unique creations with the world.

It has been such a joy to bear witness as Pixelopus has brought *Concrete Genie* to life.

July 2019

ACKNOWLEDGMENT

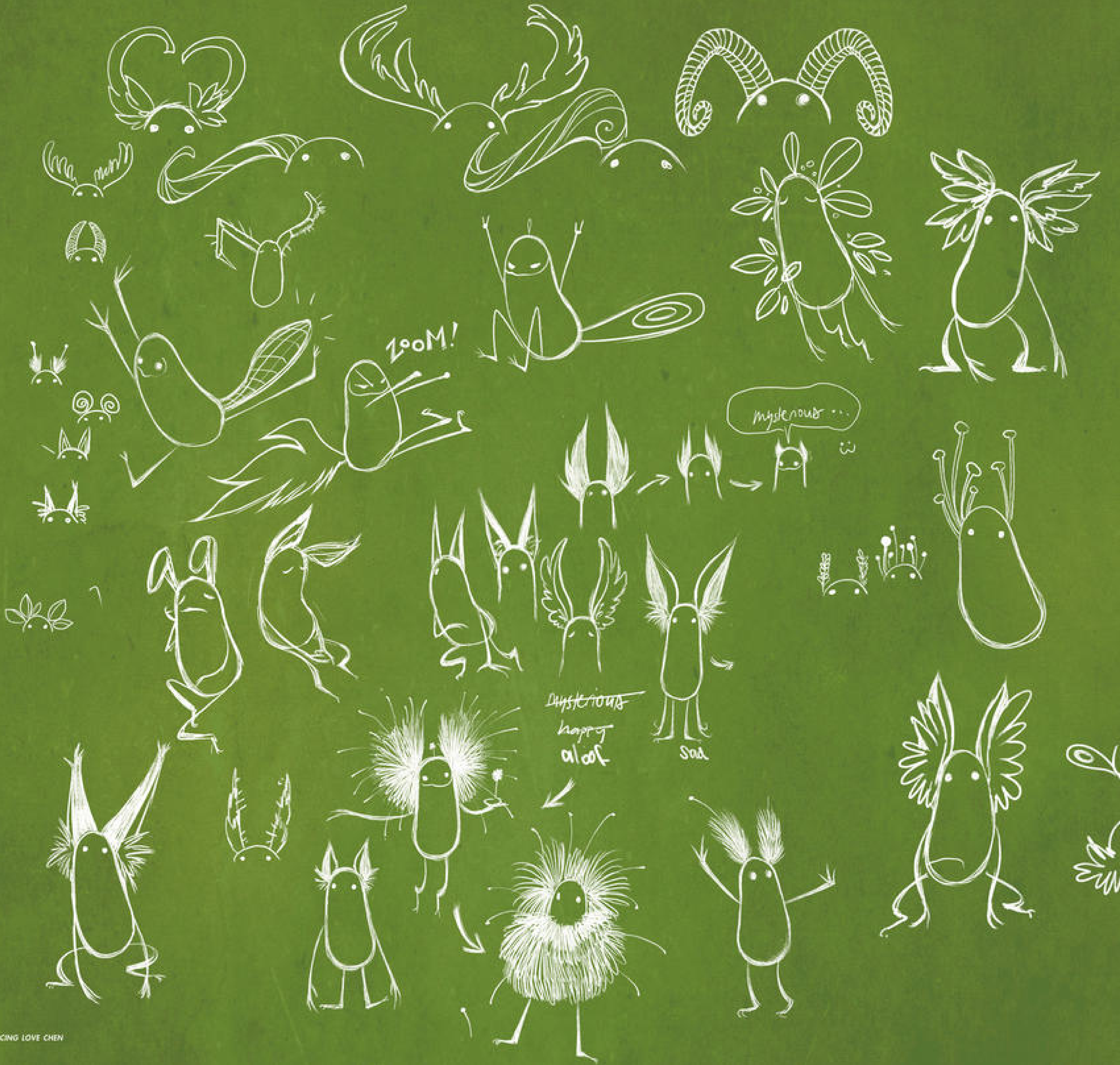
THE PIXELOPUS AND PS VR TEAM

The real stars of the show! Thank you to everyone who poured their hearts and souls into this very special project.

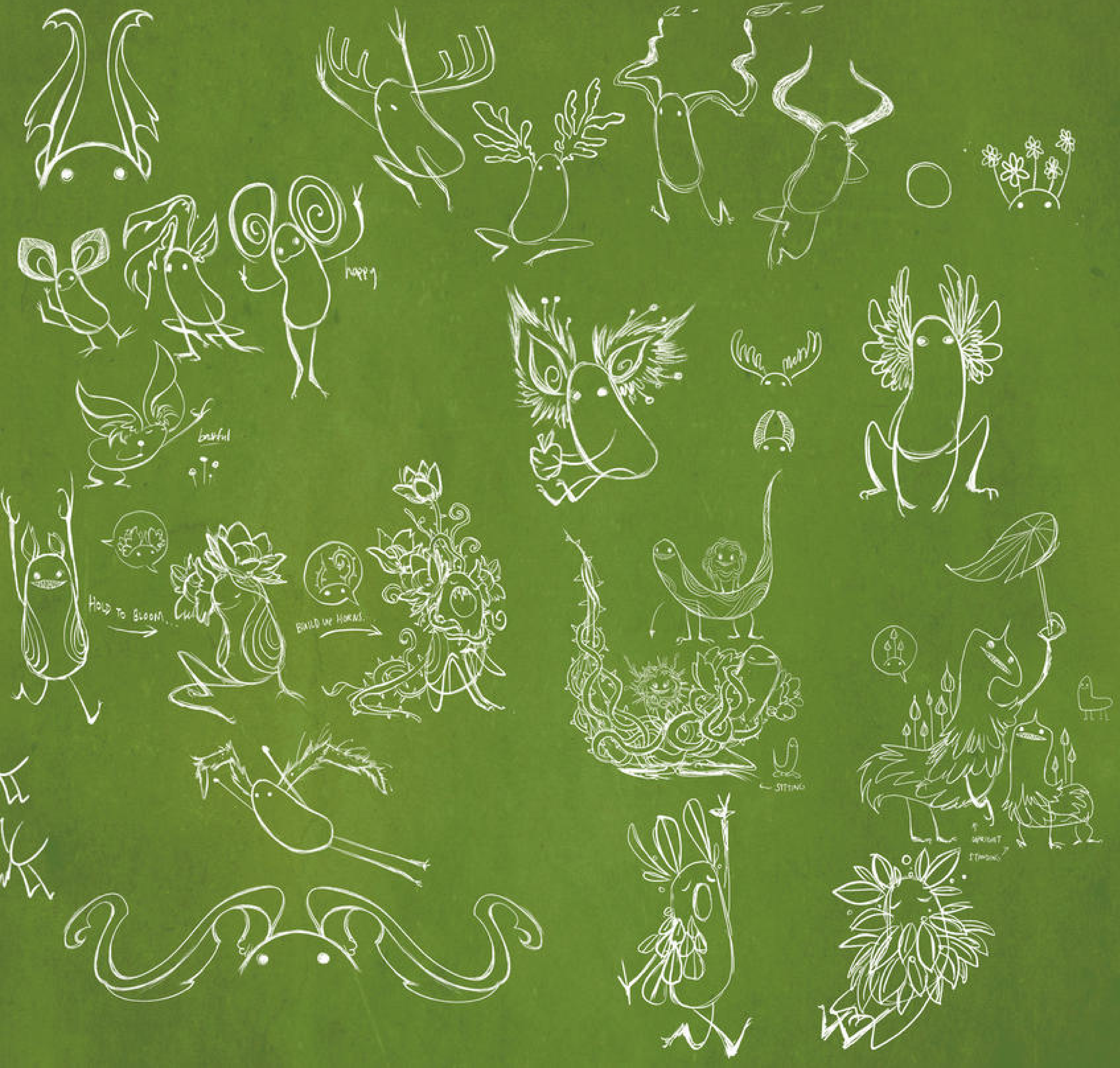
Top (Left to Right): Daniel Wilkes, Matt Boland, Nagarjuna "Arjun" Varma Harisena, Erik Buensuceso, Ashwin Kumar, Bob Archibald, Marc Fletcher, Peter Nicolai, Brent Gocke

Middle (Left to Right): Safar Bake, Christian Chang, Joe Ching, Chuck Woo, Xun "Eric" Zhang, Taylor Lambert, Edric Yamamoto, Caryn Cook, David Lee Swenson, Nikhil Kashyap, Zach Suite, Jeff Brown, Matt Burdette, Dave Smith

Bottom (Left to Right): Bianca Salinas, Tony Vu, Evan Stanley, Lancing Love Chen, Jitesh Mulchandani, Jing Li, Becky Roberts, Lucie Roberts, Dominic Robilliard, Jeff Sangalli
Not pictured: Sam Marshall


ZooM!
mysterious ...
~~mysterious~~
happy
aloof
sad

ARTIST LANCING LOVE CHEN


happy
bashful
HOLD TO BLOOM...
BUILD UP HORNS...
SITTING
UPRIGHT
STANDING

COLLECT THE *REAL-LIFE* ART PAGES OF ASH'S MAGICAL SKETCHBOOK!

Walk among the mysterious streets of Denska and collect the real pages of artwork behind Pixelopus' endearing video game *Concrete Genie*! This art book studies the power of self-expression, creativity, and the game's core fantasy of making anyone believe they can be an artist—just like the talented protagonist of the game, Ash. Return to the characters, monsters, and lore of Denska to uncover the secrets behind Pixelopus' 'living paint' mechanics that allow the walls of Denska to come to life with player creations. Witness a special, behind-the-scenes look at the development of *Concrete Genie* from the small and passionate team that brought it to life.

From the developers of a truly empowering journey about oppression and creativity, Dark Horse Books and Pixelopus are delighted to present *The Art of Concrete Genie*! This art book collects heartwarming, magnificent illustrations for fans of Ash and his wildly varied 'living paint' creations within *Concrete Genie*.

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